ANNUAL SUMMARY OF VITAL STATISTICS

KANSAS

1983

Kansas Department of Health and Environment

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ANNUAL SUMMARY OF VITAL STATISTICS KANSAS, 1983

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HIGHLIGHTS

Live Births

The Kansas live birth rate in 1983 of 16.6 represented a 1.8 percent decrease from the 1982 rate of 16.9. (p. 27)

Kansas birth rates and fertility rates have followed a pattern similar to national birth and fertility rates during the past twenty years. (Figure 5, p. 26 and Figure 6, p. 28)

Of the 40,365 births in 1983, only 185 (0.5 percent) occurred outside of the hospital setting. (p. 29)

In 1983 there were 5,243 out-of-wedlock births to Kansas residents. These out-of-wedlock births represented 13.0 percent of all live births in 1983. (Table 4, p. 32 and Figure 8, p. 33)

Birth-Related Mortality

Neonatal deaths totaled 237 in 1983, a decrease of 13.2 percent from the 273 recorded in 1982. (Table 1, p. 14)

In 1983 the number of abortions reported in Kansas decreased 11.4 percent, from 11,107 in 1982 to 9,844 in 1983. (p. 37)

There has been a general downward trend in the number of perinatal deaths since 1955. The number of deaths decreased from 1,604 in 1955 to 498 in 1983. (Figure 11, p. 41 and Table 5, p. 42)

In 1983 the Kansas infant death rate was 10.1 per thousand live births. The Kansas rate was 7.3 percent lower than the estimated United States rate of 10.9. (p. 43)

Congenital anomalies was the most common cause of infant death in Kansas in 1983 and accounted for 23.2 percent of all infant deaths. (Table 6, p. 45)

General Mortality

The Kansas death rate in 1983 remained unchanged for the third consecutive year at 9.0 deaths per thousand population. (Figure 14, p. 49)

The average age at death of Kansas residents in 1983 was 71.4 years. The average age of males in 1983 was 68.3 at the time of death; that of females was 74.9. (Table 7, p. 53)

Highlights (cont.)

Heart disease, cancer, cerebrovascular disease and accidents were the four leading causes of death among Kansans in 1983 and accounted for 71.4 percent of all deaths. (Figure 18, p. 61)

Heart disease, the number one cause of death in Kansas claimed 8,302 lives in 1983 and constituted 38.1 percent of the total number of deaths. (Figure 18, p. 61)

The cancer death rate in Kansas was 187.9 in 1983, 0.4 percent lower than the estimated national rate of 188.6. (p. 60)

The Kansas suicide rate was 12.2 in 1983, 2.5 percent higher than the estimated 1983 national rate of 11.9. (p. 69)

The Kansas homicide and legal intervention rate was 5.1 per hundred thousand population in 1983, 37.8 percent lower than the estimated national rate of 8.2. (p. 69)

In 1983, only 367 deaths were attributed to atherosclerosis; yet 1,320 of the ten leading underlying causes listed atherosclerosis as a contributing factor. (Table 17, p. 72)

Marriages

The 25,877 marriages performed in Kansas in 1983 represented a 3.0 percent decrease from the 26,670 performed in 1982. The marriage rate was 10.7, a 3.6 percent decrease from the 1982 rate of 11.1 per 1,000 population. (p. 75, and Figure 20, p. 74)

More wedding ceremonies were performed in June than any other month in 1983, with July and May being the second and third most popular months. (p. 78)

Divorces and Annulments

The number of divorces and annulments granted in Kansas decreased 1.5 percent from the 12,392 in 1982 to 12,207 in 1983. The divorce rate was 4.9, a 2.0 percent decrease from the 1982 rate of 5.0 per 1,000 population. (p. and Figure 20, p. 74)

Marriages ending in divorce lasted an average of 8.0 years, while those receiving annulments lasted an average of 1.4 years. (p. 83)

INTRODUCTION

KANSAS VITAL STATISTICS FOR 1983

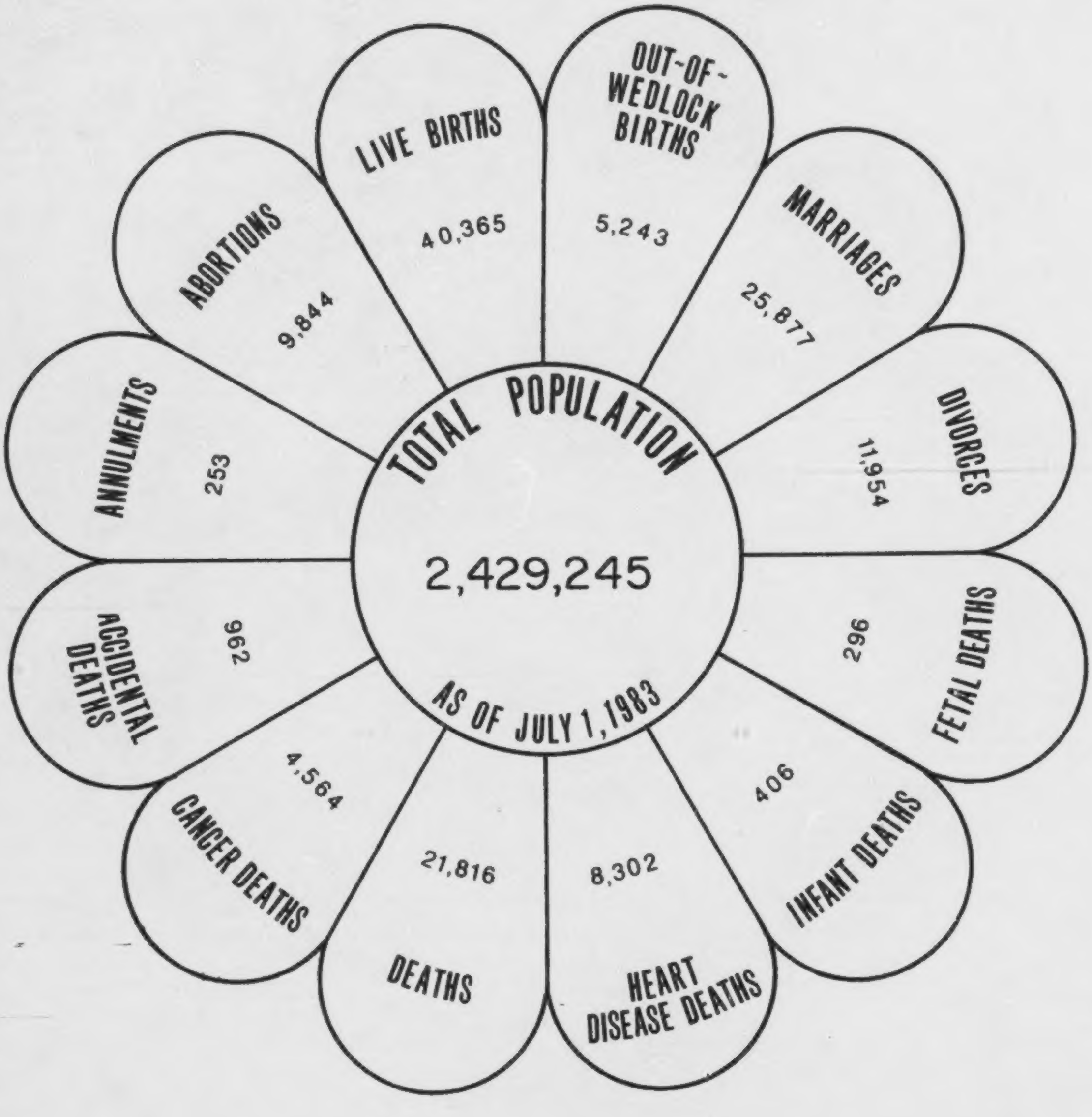


Figure I

Marriages, divorces, annulments and abortions are displayed above as occurrence data and all other vital statistics represent residence data.

INTRODUCTION

The Kansas Department of Health and Environment presents the 1983 edition of the Kansas Annual Summary of Vital Statistics. This report is a summary of data compiled from vital and health records for the 1983 calendar year and these data are displayed in Figure 1. The contents include information on population, abortion, and such vital events as live births, fetal deaths, deaths, marriages, divorces and annulments.

Registration

The statewide registration of marriage, birth and death records was initially established as a statutory duty of the Kansas State Board of Health (now the Kansas Department of Health and Environment) in 1885. At that time the law, K.S.A. 65-102, specifically provided that, "the state board of health shall supervise the registration of marriages, births and deaths, and also the registration of forms of disease prevalent in the state; and the secretary of said board shall superintend the registration of the vital statistics of the state." In 1911, systematic filing of the birth and death records at the State level was begun. Registration requirements for marriages and divorces were initiated in 1913 and 1951, respectively. Since registration of vital events began seventy-three years ago, over six million records have been processed, filed and indexed.

Technical Notes

The information presented in this report includes statistics compiled from records received during 1983 and any delayed 1983 events registered during the first two months of 1984. Certificates which were submitted after that time are considered to be negligible for purposes of annual statistical compilations. Therefore, no adjustments have been made for under-registration.

The data contained in this annual summary are primarily residence data and refer to events happening to Kansas residents (classified by county of usual residence) regardless of where the event occurred. Mother's usual residence is utilized with reference to births and fetal deaths (stillbirths). In most instances abortion information refers to Kansas resident abortions; however occurrence data are occasionally referenced. Marriages, divorces and annulments are occurrence data, for residents and nonresidents, in that marriages are recorded by county of marriage and divorces and annulments by county of decree. In many cases annulments have been grouped with divorces for purposes of presentation in this report.

The 1983, 1982, 1981 and 1979 State, county and city population estimates utilized throughout the report were prepared by the Kansas Department of Health and Environment (KDHE) and were computed by using U.S. Bureau of the Census figures as a base and extrapolating by the method of least squares regression. The 1980 population figures were preliminary data obtained from the U.S. Bureau of the Census. Population figures prior to 1979 were obtained from the U.S. Bureau of the Census during census years and from compilations prepared by the State Board of Agriculture from reports by county appraisers during noncensus years.

The KDHE estimates were used beginning in 1979 because (1) the Agricultural Census had been terminated by the Legislature and additionally (2) students, military personnel, inmates of institutions and also migrant workers are assigned to the last prior legal residence by the Agricultural Census and to their current place of abode by the U.S. Census. Health care needs for military, migrant workers, students, etc. can best be addressed by using their current residence rather than their permanent residence.

In many cases rates and ratios are based upon a small number of events and/or a small population or upon a different population base. Therefore, care should be exercised in the interpretation of these data as they may not be indicative of actual trends.

Comments and suggestions concerning the contents or general format of this report are welcome and should be directed to the Kansas Department of Health and Environment. Since this publication is only a summary, many details which are being tabulated for inclusion in the Department's permanent statistical files are not presented. More detailed information may be obtained from KDHE upon request.

DEFINITIONS

DEFINITIONS

The following terms, formulas and symbols are defined for more meaningful interpretation of the data contained in this report.

TERMS

Abortion: (induced termination of pregnancy)	The purposeful interruption of pregnancy with the intention other than to produce a liveborn infant or to remove a dead fetus and which does not result in a live birth.
Birth Weight:	The weight of the fetus or infant at the time of delivery.
Cause of Death:	The underlying cause of death, or that condition giving rise to the chain of events leading to death.
Fetal Death:	The complete expulsion or extraction of a product of human conception from its mother, which weighs more than 350 grams and which is, irrespective of the duration of pregnancy, not a live birth. (Intentionally aborted fetuses which weigh more than 350 grams are not included as fetal deaths in this report.)
Hebdomadal Death:	The death of a liveborn infant which occurs prior to the seventh day of life.
I.C.D. Code:	The disease-identifying number classified in the Ninth Revision of the Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, Adopted (1975).
Infant Death:	The death of a liveborn infant which occurs within the first year of life.
Live Birth:	The complete expulsion or extraction of a product of human conception from its mother, irrespective of the duration of pregnancy, which, after such expulsion or extraction, shows any evidence of life such as breathing, heart beat, pulsation of the umbilical cord, or voluntary muscle movement, whether or not the umbilical cord has been cut or the placenta attached.

Maternal Death:	The death of a mother caused by complications of pregnancy, childbirth or the puerperium.
Natural Increase:	Live births minus total deaths of a population within a given year.
Neonatal Death:	The death of a liveborn infant which occurs prior to the twenty-eighth day of life.
Net Migration:	The population increase or decrease minus the natural increase.
Occurrence Data:	Vital statistics compiled on the basis of where the vital event actually occurred.
Out-of-Wedlock Birth:	A birth occurring to a mother who is not married at the time of conception, at the time of birth or at any time between conception and birth.
Perinatal Period III Death:	The death of a fetus which weighs more than 350 grams or of a liveborn infant during the hebdomadal period (less than seven days after birth).
Population Density:	The average number of inhabitants per square mile.
Premature Birth:	Birth of an infant weighing less than 2,500 grams (5 lbs. 8 oz.) at the time of birth.
Residence Data:	Vital statistics compiled on the basis of the usual place of residence of the person(s) to whom the vital event occurred.
Total Births:	All live births plus fetal deaths.

RATES AND RATIOS

Abortion Ratio:	$\frac{\text{induced abortions}}{\text{live births}}$	X 1,000
Birth Rate:	$\frac{\text{live births}}{\text{total population}}$	X 1,000
Death Rate:	$\frac{\text{total deaths}}{\text{total population}}$	X 1,000
Disease-Specific Death Rate:	$\frac{\text{disease-specific deaths}}{\text{total population}}$	X 100,000

Divorce Rate:	$\frac{\text{divorces}}{\text{total population}}$	X 1,000
Divorce and Annulment Rate:	$\frac{\text{divorces and annulments}}{\text{total population}}$	X 1,000
Fertility Rate:	$\frac{\text{live births}}{\text{female population 15-44}}$	X 1,000
Fetal Death Rate:	$\frac{\text{fetal deaths}}{\text{total births}}$	X 1,000
Hebdomadal Death Rate:	$\frac{\text{hebdomadal deaths}}{\text{live births}}$	X 1,000
Infant Death Rate:	$\frac{\text{infant deaths}}{\text{live births}}$	X 1,000
Marriage Rate:	$\frac{\text{marriages}}{\text{total population}}$	X 1,000
Maternal Death Rate:	$\frac{\text{maternal deaths}}{\text{live births}}$	X 10,000
Natural Increase Rate:	$\frac{\text{live births minus total deaths}}{\text{total population}}$	X 1,000
Neonatal Death Rate:	$\frac{\text{neonatal deaths}}{\text{live births}}$	X 1,000
Net Migration Rate:	$\frac{\text{net migration}}{\text{total population}}$	X 1,000
Out-of-Wedlock Birth Ratio:	$\frac{\text{out-of-wedlock births}}{\text{live births}}$	X 100
Perinatal Period III Death Rate:	$\frac{\text{perinatal deaths}}{\text{total births}}$	X 1,000
Premature Birth Ratio:	$\frac{\text{premature births}}{\text{live births}}$	X 100

SYMBOLS AND ABBREVIATIONS

n.s.	not stated
n.a.	not available
n/a	not applicable
-	zero
0.0	quantity or percent more than zero but less than 0.05.
...	rate or percent not applicable
*	rate, ratio, or percent does not meet statistical standards of precision or reliability (designated whenever the denominator is less than 100).

SUMMARY OF VITAL EVENTS

Table 1
Vital Events and Percent Change
Kansas, 1983, 1982 and 1973

Vital Event	1983	1982	Percent Change 1982 to 1983	1973	Percent Change 1973 to 1983
Total Births........	40,661	41,093	-1.1	32,327	+25.8
Live Births..........	40,365	40,757	-1.0	31,972	+26.3
Premature..........	2,455	2,532	-3.0	2,044	+20.1
Out-of-wedlock.....	5,243	5,259	-0.3	2,742	+91.2
Fetal Deaths.........	296	336	-11.9	355	-16.6
Total Deaths.........	21,816	21,700	+0.5	22,725	-4.0
Perinatal Deaths...	498	570	-12.6	697	-28.6
Hebdomadal Deaths..	202	234	-13.7	342	-40.9
Neonatal Deaths....	237	273	-13.2	374	-36.6
Infant Deaths......	406	417	-2.6	496	-18.1
Maternal Deaths....	4	3	*	5	*
Marriages...........	25,877	26,670	-3.0	24,592	+5.2
Divorces............	11,954	12,139	-1.5	10,181	+17.4
Annulments..........	253	253	-	291	-13.1

Residence data are presented for births and deaths.
Occurrence data are presented for marriages, divorces and annulments.

SUMMARY OF VITAL EVENTS

Registration of Kansas vital events (live births, total deaths, fetal deaths, marriages, divorces and annulments) decreased slightly from 101,855 in 1982 to 100,561 in 1983, a decrease of 1.3 percent. Table 1 compares these vital events of 1983 with those of 1982 and 1973.

The largest percentage changes between 1982 and 1983 were a 13.7 percent decrease in the number of hebdomadal deaths and an 13.2 percent decrease in the number of neonatal deaths. Between 1973 and 1983, the number of out-of-wedlock births has increased 91.2 percent and the number of hebdomadal deaths has decreased 40.9 percent.

Another method of examining trends in vital events is the comparison of rates from year to year. Table 2 examines these rates (rate computations are described on pages 10 and 11) from 1973 to 1983 and the rates are graphically presented in Figure 2.

The total death rate in 1983 remained at 9.0 for the third consecutive year, while the live birth rate decreased by 1.8 percent, from 16.9 in 1982 to 16.6 in 1983. The marriage rate in 1983 decreased 3.6 percent, from 11.1 in 1982 to 10.7 in 1983. The divorce and annulment rate decreased 2.0 percent, from 5.1 in 1982 to 5.0 in 1983.

Infant, hebdomadal and neonatal death rates decreased considerably after 1973. The fetal death rate decreased from 8.2 in 1982 to 7.3 in 1983.

The remainder of this report elaborates on each of these vital events, summarizing the data from 1983 vital and health records, depicting trends and comparing Kansas events with those for the United States where appropriate.

Table 2
Vital Events by Number, Rate and Ratio*
Kansas, 1973-1983

Vital Event	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Live Births											
Number	31,972	32,712	33,707	35,278	36,827	36,581	38,916	40,686	41,202	40,757	40,365
Rate	13.9	14.2	14.6	15.2	15.7	15.5	16.5	17.2	17.2	16.9	16.6
Out-of-Wedlock Births											
Number	2,742	2,867	3,205	3,491	3,873	4,183	4,593	4,979	5,086	5,259	5,243
Ratio	8.6	8.8	9.5	9.9	10.5	11.4	11.8	12.2	12.3	12.9	13.0
Fetal Deaths											
Number	355	379	341	364	308	331	330	340	316	336	296
Rate	11.0	11.5	10.0	10.2	8.3	9.0	8.4	8.3	7.6	8.2	7.3
Hebdomadal Deaths											
Number	342	354	304	310	335	254	260	226	264	234	202
Rate	10.7	10.8	9.0	8.8	9.1	6.9	6.7	5.6	6.4	5.7	5.0
Perinatal Period III Deaths											
Number	697	733	645	674	643	585	590	566	580	570	498
Rate	21.6	22.2	18.9	18.9	17.3	15.8	15.0	13.8	14.0	13.9	12.3
Neonatal Deaths											
Number	374	393	341	365	373	302	301	269	322	273	237
Rate	11.7	12.0	10.1	10.3	10.1	8.3	7.7	6.6	7.8	6.7	5.9
Infant Deaths											
Number	496	514	468	492	480	440	427	412	452	417	406
Rate	15.5	15.7	13.9	13.9	13.0	12.0	11.0	10.1	11.0	10.2	10.1
Maternal Deaths											
Number	5	6	6	1	4	8	3	4	6	3	4
Rate	1.6	1.8	1.8	0.3	1.1	2.2	0.8	1.0	1.5	0.7	1.0
Total Deaths											
Number	22,725	22,156	21,726	21,780	21,271	21,566	21,062	21,910	21,579	21,700	21,816
Rate	9.9	9.6	9.4	9.4	9.1	9.1	8.9	9.3	9.0	9.0	9.0
Marriages											
Number	24,592	24,491	23,767	23,559	23,673	23,975	24,774	24,847	26,137	26,670	25,877
Rate	10.7	10.7	10.3	10.1	10.1	10.2	10.5	10.5	10.9	11.1	10.7
Divorces and Annulments											
Number	10,472	11,484	12,561	12,833	12,629	12,668	12,749	13,410	13,737	12,392	12,207
Rate	4.6	5.0	5.4	5.5	5.4	5.4	5.4	5.7	5.7	5.1	5.0

*Rate and Ratio computations are explained on pages 10 and 11.
Residence data are presented for births and deaths.
Occurrence data are presented for marriages, divorces and annulments.

SELECTED VITAL EVENT RATES
KANSAS, 1973 - 1983

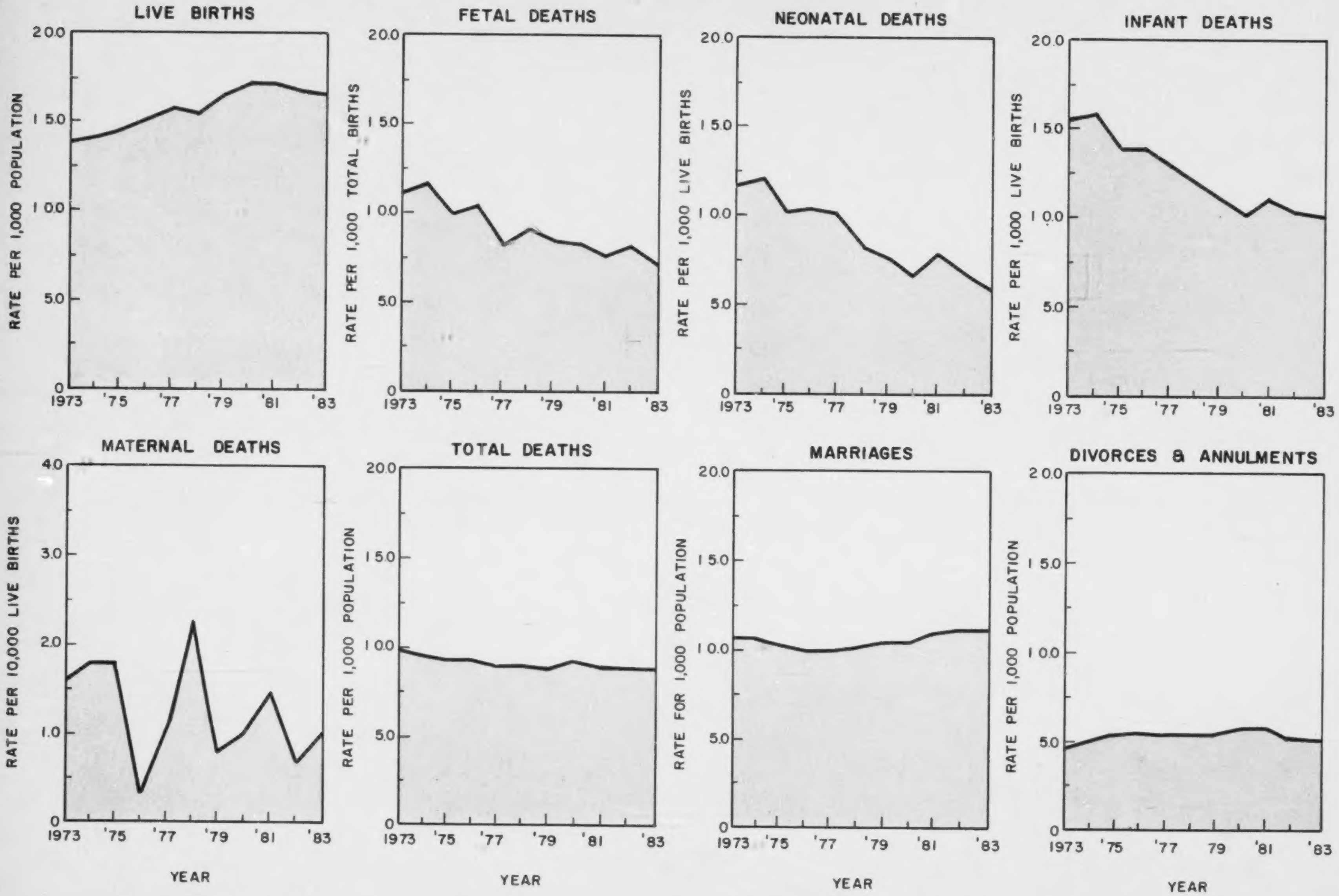
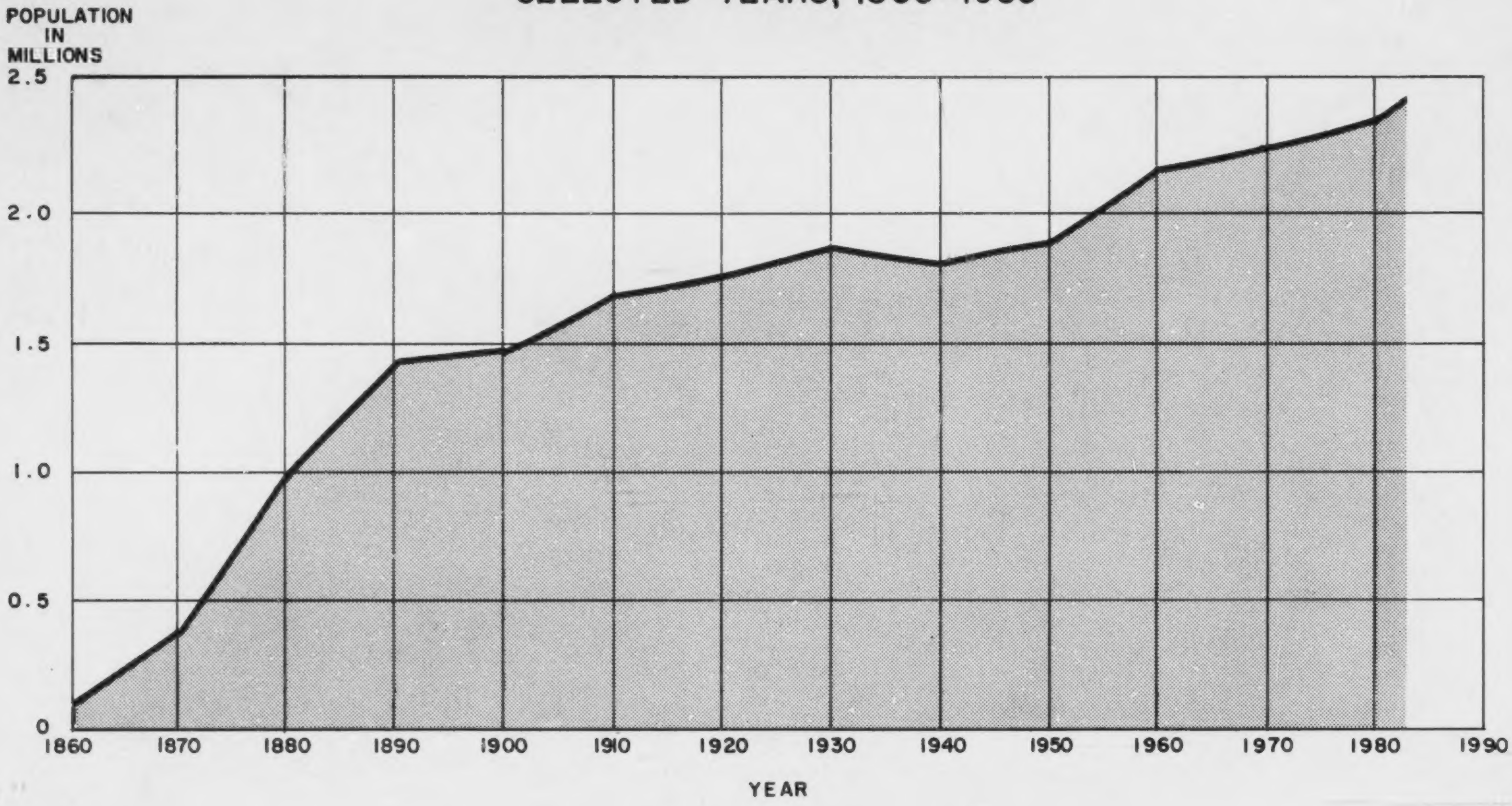


Figure 2

POPULATION

POPULATION GROWTH IN KANSAS
SELECTED YEARS, 1860-1983



Sources of Population Counts: Kansas Department of Health and Environment (1981 - 1983)
United States Bureau of the Census (all other years)

Figure 3

POPULATION

In 1983 the population of Kansas was 2,429,245. This figure was estimated by the Kansas Department of Health and Environment and is an increase of 0.8 percent, or 20,464, over that estimated for July 1, 1982.

As depicted in Figure 3, Kansas experienced its greatest population growth during the second half of the nineteenth century. During the thirty-year period from 1860 to 1890 population increased thirteen-fold. The next thirty years demonstrated slower growth, increasing by less than two-fold from 1890 to 1920. The reduction in the birth rate and the increase in out-migration during the Depression Years of the 1930's resulted in a decrease in total population of almost four percent. Population began increasing again with the onset of World War II. The economic prosperity of the Fifties and the ensuing "Baby Boom" were reflected in a population increase of 14.3 percent from 1950 to 1960. Slowed growth was again exhibited during the Sixties when the population increased 3.2 percent, and in the Seventies, with an increase of 5.1 percent. Over the past three years the population has increased 2.8 percent. Population estimates, as well as annual increases or decreases for the past thirty years are shown in Table 3. (County population totals, 1979 to 1983, are given in Appendix Table 24.)

Natural Increase and Net Migration

The combined factors of the natural increase (live births minus total deaths) and net migration (actual population increase or decrease minus the natural increase) determine population growth. The annual natural increase and net migration from 1954 to 1983 are exhibited in Table 3. The highest natural increase during the period was 34,319 in 1954, which represents a natural increase rate of 17.2 per thousand population. After a general downward trend in the years that followed, the natural increase again began rising in 1974 and the 1983 natural increase was 18,549. The natural increase rate decreased 2.6 percent from 7.8 per thousand population in 1982 to 7.6 in 1983. Net migration, on the other hand, has been less predictable, with sudden large fluctuations in out-migration. Considerable out-migration occurred from 1955 to 1964. The net migration for 1983 was not available at the time of publication.

Table 3
Population, Natural Increase and Net Migration
Kansas, 1954-1983

Year	Population*	Population Increase or Decrease During Year	Natural Increase	Net Migration
1983. . . .	2,429,245	n.a.	18,549	n.a.
1982. . . .	2,408,781	20,464	19,057	1,407
1981. . . .	2,389,202	19,579	19,623	-44
1980. . . .	2,363,208	25,994	18,776	7,218
1979. . . .	2,362,075	1,133	17,854	-16,721
1978. . . .	2,359,262	2,813	15,015	-12,202
1977. . . .	2,341,261	18,001	15,556	2,445
1976. . . .	2,327,471	13,790	13,498	292
1975. . . .	2,314,479	12,992	11,981	1,011
1974. . . .	2,299,220	15,259	10,556	4,703
1973. . . .	2,301,623	-2,403	9,247	-11,650
1972. . . .	2,277,905	23,718	10,841	12,877
1971. . . .	2,249,248	28,657	13,824	14,833
1970. . . .	2,249,071	177	16,364	-16,187
1969. . . .	2,287,302	-38,231	14,350	-52,581
1968. . . .	2,265,170	22,132	13,110	9,022
1967. . . .	2,236,750	28,420	13,196	15,224
1966. . . .	2,220,362	16,388	14,192	2,196
1965. . . .	2,197,815	22,547	17,516	5,031
1964. . . .	2,180,533	17,282	21,649	- 4,367
1963. . . .	2,172,296	8,237	23,804	-15,567
1962. . . .	2,165,009	7,287	27,001	-19,714
1961. . . .	2,146,154	18,855	28,940	-10,085
1960. . . .	2,130,579	15,575	29,621	-14,046
1959. . . .	2,115,441	15,138	31,891	-16,753
1958. . . .	2,100,665	14,776	31,401	-16,625
1957. . . .	2,081,654	19,011	32,706	-13,695
1956. . . .	2,077,711	3,943	33,408	-29,465
1955. . . .	2,050,478	27,233	33,878	-6,645
1954. . . .	1,999,457	51,021	34,319	16,702

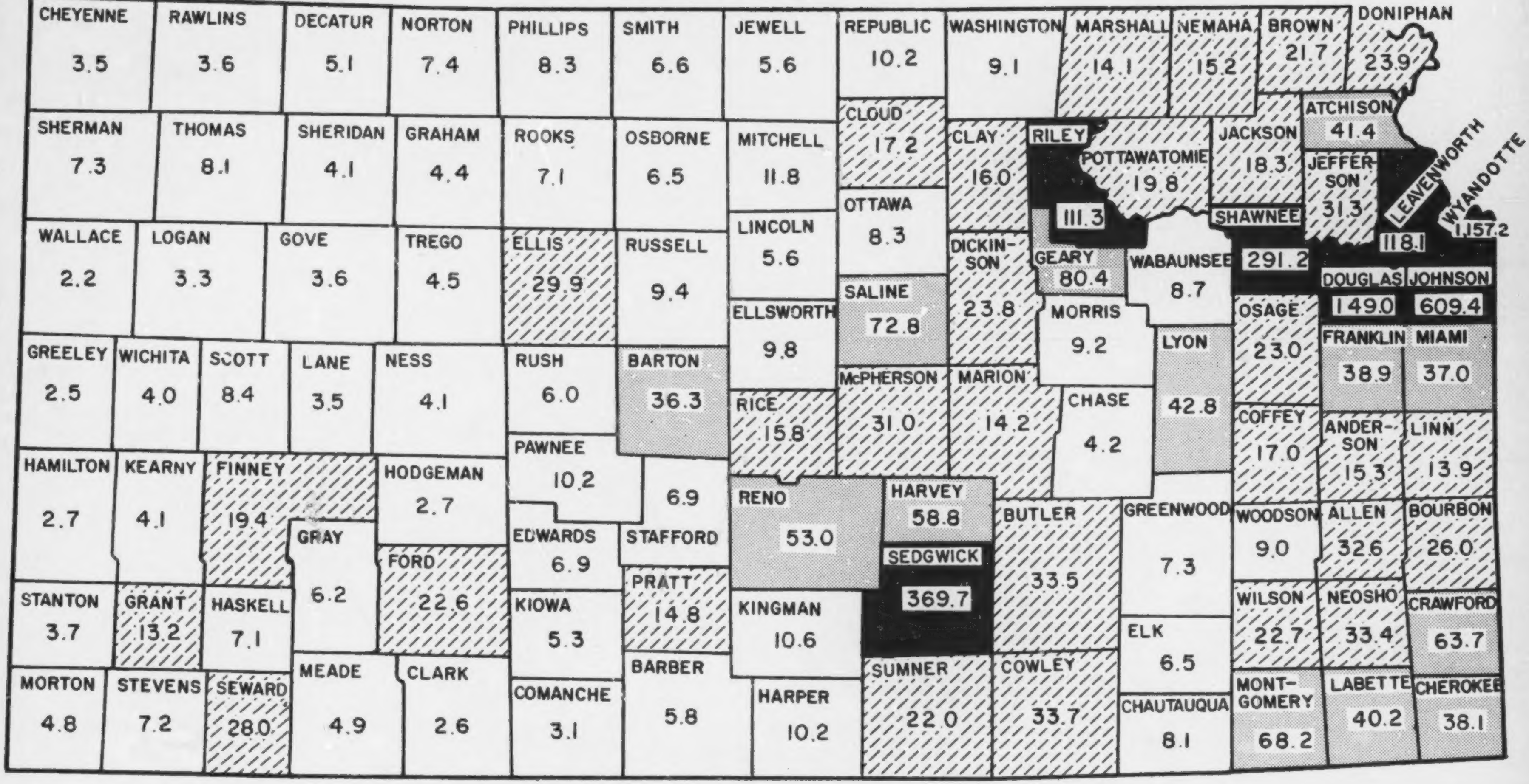
*Sources: Kansas Department of Health and Environment (1979, 1981-1983)
United States Bureau of the Census (1970, 1980)
Kansas Board of Agriculture/County Appraisers (all other years)

Population Density

The total land area of the State of Kansas is 81,786 square miles. The population density of the State, or the average number of inhabitants per square mile in 1983, was 29.7 as compared with 29.5 in 1982 and 29.2 in 1981.

As illustrated in Figure 4, the population density varied considerably among counties. In 1983, 21 of Kansas' 105 counties had population densities of less than 5.0. These counties were predominantly in the Western portion of the State.

POPULATION DENSITY BY COUNTY
KANSAS, 1983



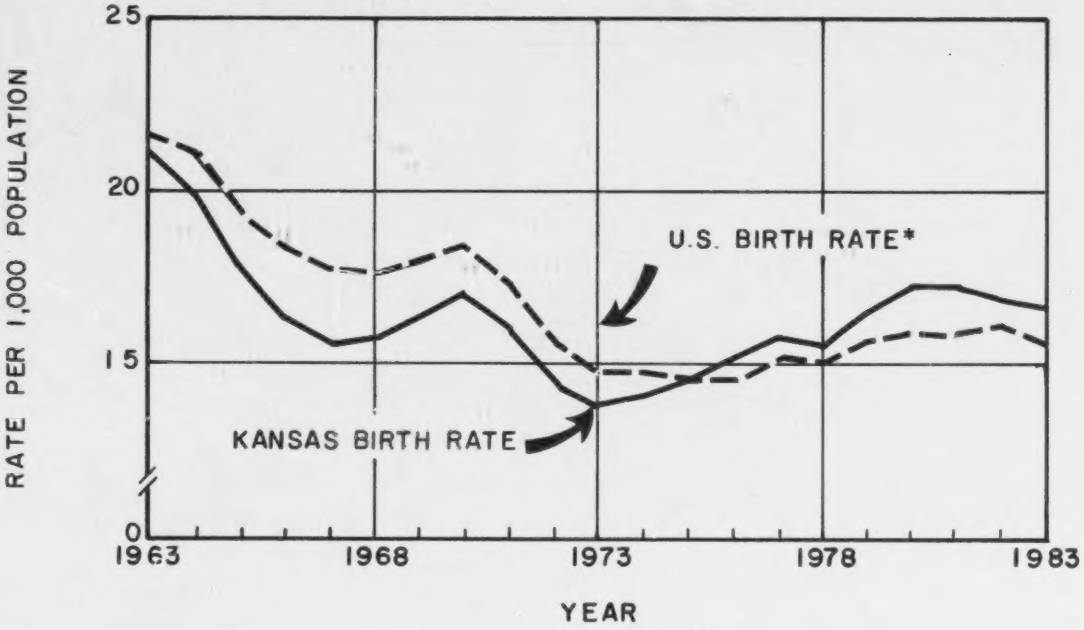
STATE POPULATION DENSITY: 29.7

Sources: Land area for each county obtained from the United States Bureau of the Census (1980). Population figures for 1983 were from the Kansas Department of Health and Environment.

Figure 4

LIVE BIRTHS

BIRTH RATES
KANSAS AND THE UNITED STATES, 1963-1983



*1982 and 1983 United States birth rates represent provisional data from the National Center for Health Statistics.

Residence data.

Figure 5

LIVE BIRTHS

During 1983, 40,365 live births were recorded for mothers with Kansas residency, representing a birth rate of 16.6 per 1,000 population. These figures reflect both a numerical decrease of 1.0 percent below the 40,757 live births in 1982, and a rate decrease of 1.8 percent below the 1982 rate of 16.9.

Trends

Kansas birth rates and fertility rates have followed a pattern similar to national birth and fertility rates during the past twenty years. Illustrated in Figures 5 and 6 are comparisons of Kansas birth rates and fertility rates with those of the United States.

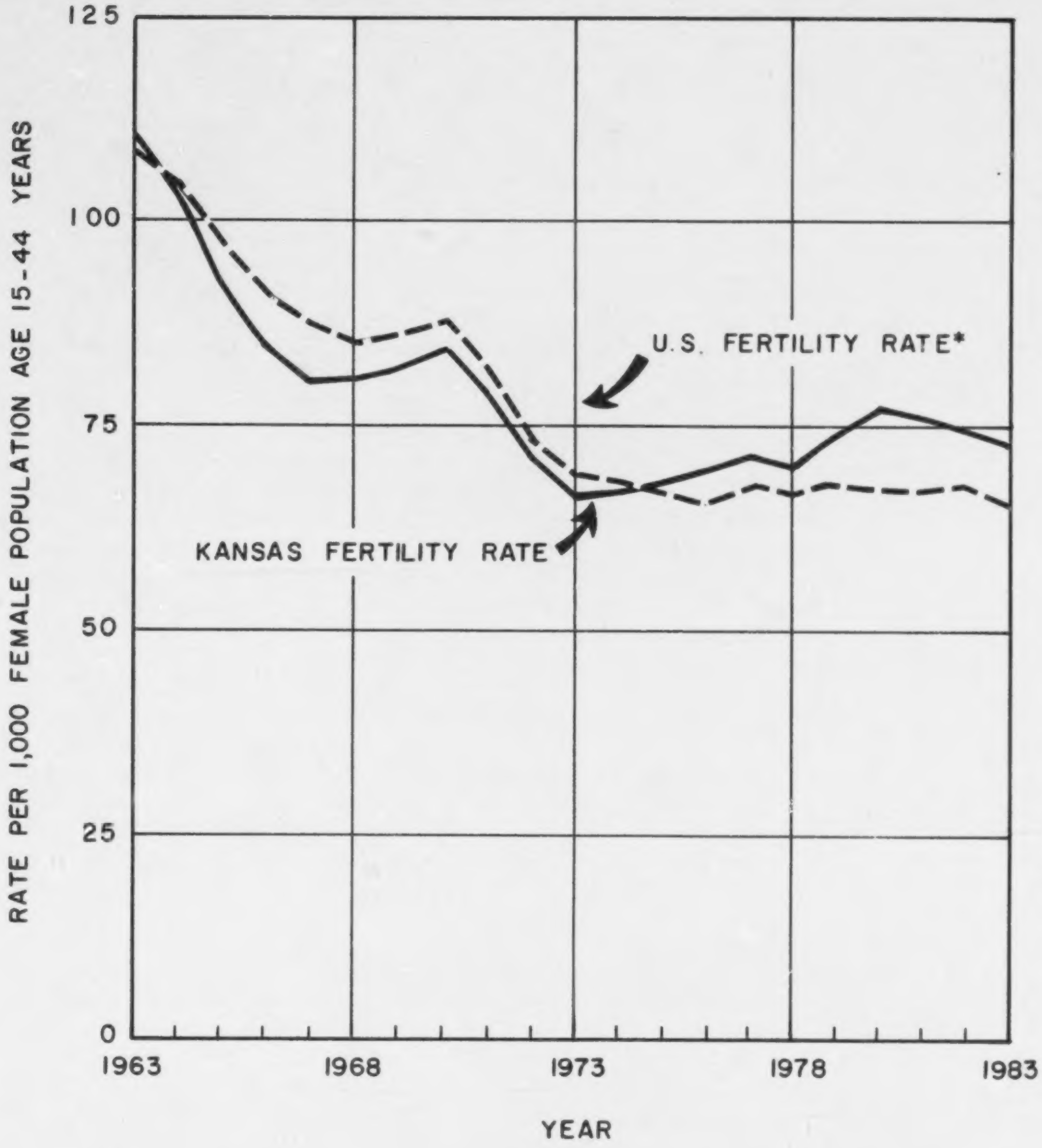
The Kansas birth rate was 21.2 in 1963, 2.3 percent below the national rate of 21.7. Following 1963, the Kansas birth rate dropped for four consecutive years. After reaching a low of 15.6 in 1967, the Kansas birth rate turned upward slightly in the late 1960's and 1970. After another short-term decline of three years, the Kansas birth rate reached a new low of 13.9 in 1973. In 1978, Kansas experienced a decreased birth rate for the first time in five years. The birth rate then increased to a rate of 17.2 for 1980 and 1981, followed by a two-year decline in 1982 and 1983. (The number of births and birth rates from 1979-1983 for each Kansas county are given in Appendix Table 25.)

The Kansas fertility rate was 114.4 in 1963, 5.6 percent above the national rate of 108.3. Following 1963, the fertility rate began to drop and did so for four consecutive years. After a short-term increase in 1969 and 1970, the fertility rate declined for three years. Kansas, in 1978, experienced a decreased fertility rate for the first time in five years, followed by an increase in 1979 and 1980. In 1983, the fertility rate in Kansas was 73.2, a 1.7 percent decrease from the 1982 rate of 74.5.

Sex of Infant, Race and Plurality

Since birth information was first recorded in Kansas in 1915, the percent distribution of live births has remained relatively constant for males and females. In 1915, the percentage breakdown for male and female live births was 51.6 percent and 48.4 percent, respectively. The distribution in 1983 was nearly identical, with 51.3 percent of the live births recorded as males and 48.7 percent as females.

FERTILITY RATES
KANSAS AND THE UNITED STATES, 1963 - 1983



*1982 and 1983 United States fertility rates represent provisional data from the National Center for Health Statistics.

Residence data.

Figure 6

Live Births: Distribution by Race of Mother by Sex of Infant

Race of Mother	Live Births	Sex of Infant Male	Female
Total	40,365	20,694	19,671
White	36,424	18,684	17,740
Black	2,971	1,510	1,461
Other Races	959	497	462
N.S.	11	3	8

White mothers gave birth to 90.2 percent of the liveborn infants in Kansas in 1983. Another 7.4 percent of the mothers were black and other races represented 2.4 percent of the live births.

In 1983, a total of 782 live births, only 1.9 percent, represented multiple births, while a total of 39,583 single births were recorded. Of the 782 multiple births, 776 were twins, and 6 were triplets.

Birth Order

First births accounted for 40.3 percent of all live births in 1983. Second-born infants represented 34.1 percent and third births, 16.3 percent. Thirty years ago, in 1953, 28.9 percent of the 51,890 live births were first births; 29.0 percent were second-born infants and 20.6 percent were third births. The number and percent of live births by order of birth are presented below for 1983:

Live Births: Number and Percent by Birth Order

Birth Order	Number	Percent
Total	40,365	100.0
First	16,280	40.3
Second	13,786	34.1
Third	6,584	16.3
Fourth	2,386	5.9
Fifth	801	2.0
Sixth	300	0.7
Seventh	111	0.3
Eighth	65	0.2
Ninth	25	0.1
Tenth and Over	27	0.1

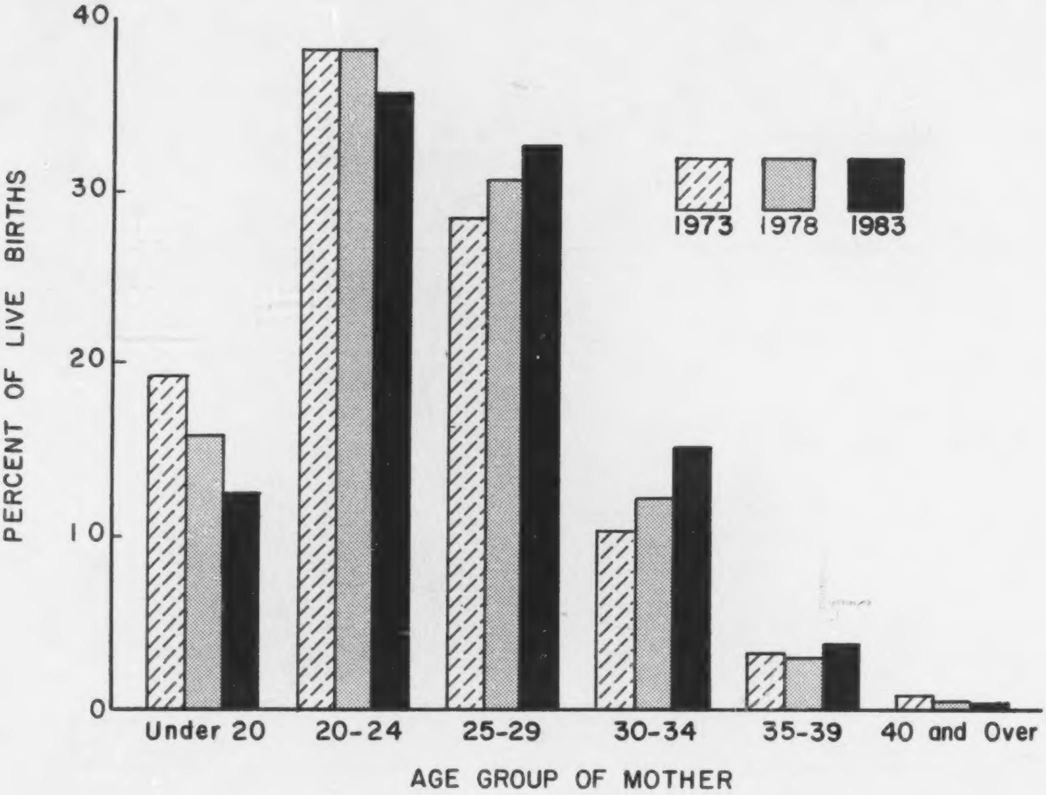
Institution of Birth and Attendant

The number of deliveries which are performed in hospitals has increased dramatically through the years. For example, in 1933, 24.0 percent of all live births occurred in a hospital. Fifty years later, in 1983, only 185 of the 40,365 live births occurred outside of the hospital setting, a mere 0.5 percent.

Another factor which may affect both maternal and infant health is whether or not the attendant is present at the time of birth. Unlike the institution of birth this factor has remained consistent for fifty years. In 1933, 99.4 percent of the births were physicians' deliveries. By 1983, the situation was virtually unchanged--98.3 percent of the births were attended by a physician.

Parental Age

The average maternal age in 1983 was 25.2 years, while the average paternal age was 27.8 years. Figure 7 shows the changing pattern in the distribution of births by maternal age for 1973, 1978 and 1983.



LIVE BIRTHS: PERCENT DISTRIBUTION
BY AGE GROUP OF MOTHER
KANSAS, 1973, 1978 AND 1983

Residence data.

Figure 7

The ages from 20 to 24 were the most popular child-bearing ages in 1973, 1978 and 1983. During this same time frame, however, there was a gradual downward trend in the proportion of child-bearing women in the 20 to 24 year old age group, and a gradual increase in the proportion of child-bearing women between 25 and 34. (Live births by county of maternal residence and age group are shown in Appendix Table 26.)

Birth Weight and Premature Births

Birth weights are classified as low, normal or heavy according to the gram limits outlined in Table 4. Ninety-two (92.2) percent of the live births in 1983 were of normal weight, between 2,500 and 4,500 grams. Babies weighing over 4,500 grams constituted only 1.7 percent of the live births.

Low birth weight babies of 2,499 grams or less is the weight category generally considered the most critical in regard to infant survival chances. This weight category comprises those deliveries herein referred to as premature births. The 2,455 premature births in 1983 accounted for 6.1 percent of all live births. The number of premature births for mothers in each age group, percent distribution and age-specific premature birth ratios (premature births as a percent of all live births within an age group) are shown in Table 4.

The age of the mother is an important factor influencing the birth weight of the baby. In 1983, mothers 20 to 24 years of age accounted for the largest percentage (36.4) of the premature births; followed by 28.7 percent accounted for by mothers 25-29 years of age. A somewhat more reliable indicator of the tendency for child-bearing women in a particular age group to have premature births is the age-specific premature birth ratio. The largest age-specific premature birth ratio, in 1983, was 8.3 percent of the births for mothers 15-19 years of age followed by 9.2 percent of the births for mothers 40-44 years of age.

Out-of-Wedlock Births

In 1983, there were 5,243 out-of-wedlock births to Kansas residents, reflecting a 0.3 percent decrease over the 1982 total of 5,259. These out-of-wedlock births represented 13.0 percent of all live births in 1983.

Although the out-of-wedlock birth ratio in Kansas was below the national ratio from 1963 to 1981 (Figure 8), the increasing trend in the out-of-wedlock birth ratio in Kansas was similar to the upward trend throughout the United States during this period.

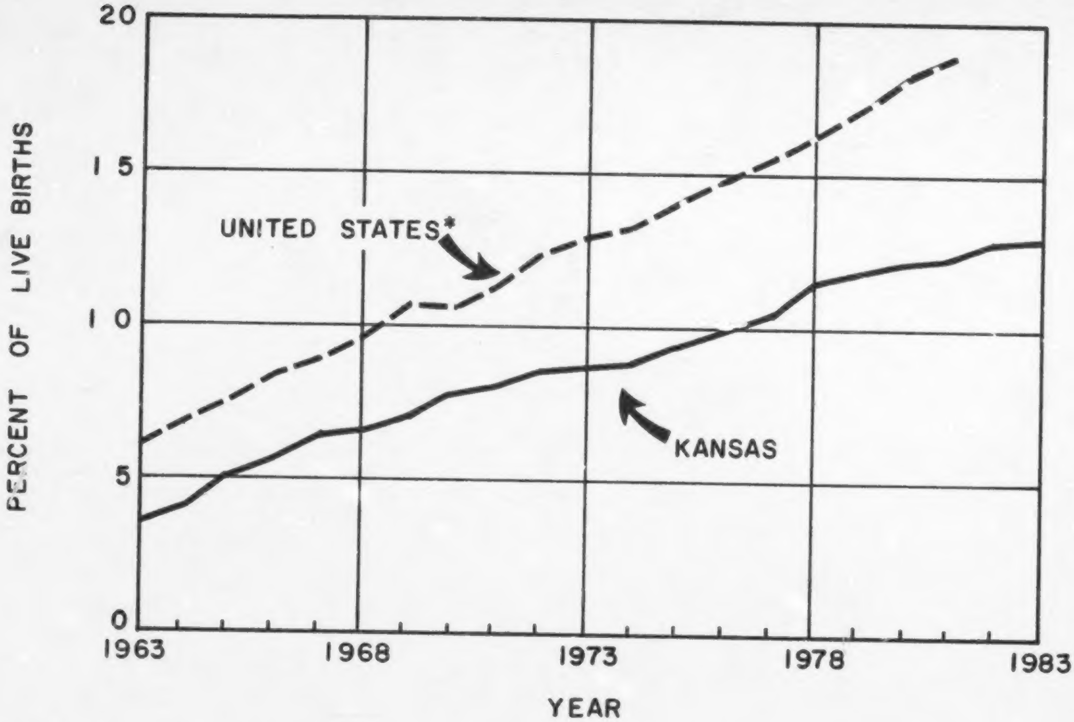
The number of out-of-wedlock births to mothers in each age group in 1983, percent distribution and age-specific out-of-wedlock birth ratios, or the out-of-wedlock births as a percent of all live births within an age group, are shown in Table 4. (Out-of-wedlock births by maternal county of residence by maternal age group are given in Appendix Table 27.)

Table 4
Live Births by Age Group of Mother, by Selected Characteristics
Kansas, 1983

Age Group of Mother	Total	Selected Characteristics of Live Births									
		Birth Weight (Grams)				Premature Births			Out-of-Wedlock Births		
		Under 2,500 (Low)	2,500 - 4,500 (Normal)	Over 4,500 (Heavy)	Not Stated	Number	Percent	Age-Specific Ratio	Number	Percent	Age-Specific Ratio
All Ages.......	40,365	2,455	37,201	696	13	2,455	100.0	...	5,243	100.0	...
10-14..........	49	6	42	1	-	6	0.2	*	45	0.8	*
15-19..........	4,966	412	4,510	41	3	412	16.8	8.3	2,076	39.6	41.8
20-24..........	14,399	893	13,308	193	5	893	36.4	6.2	2,012	38.4	14.0
25-29..........	13,115	705	12,174	235	1	705	28.7	5.4	776	14.8	5.9
30-34..........	6,147	326	5,642	178	1	326	13.3	5.3	246	4.7	4.0
35-39..........	1,518	97	1,382	37	2	97	4.0	6.4	73	1.4	4.8
40-44..........	163	15	136	11	1	15	0.6	9.2	15	0.3	*
45 and Over....	8	1	7	-	-	1	0.0	*	-	-	-

Residence data.

OUT-OF-WEDLOCK BIRTH RATIOS
KANSAS AND THE UNITED STATES, 1963-1983



*1982 and 1983 data from the National Center for Health Statistics were not available at the time of publication.

Residence data.

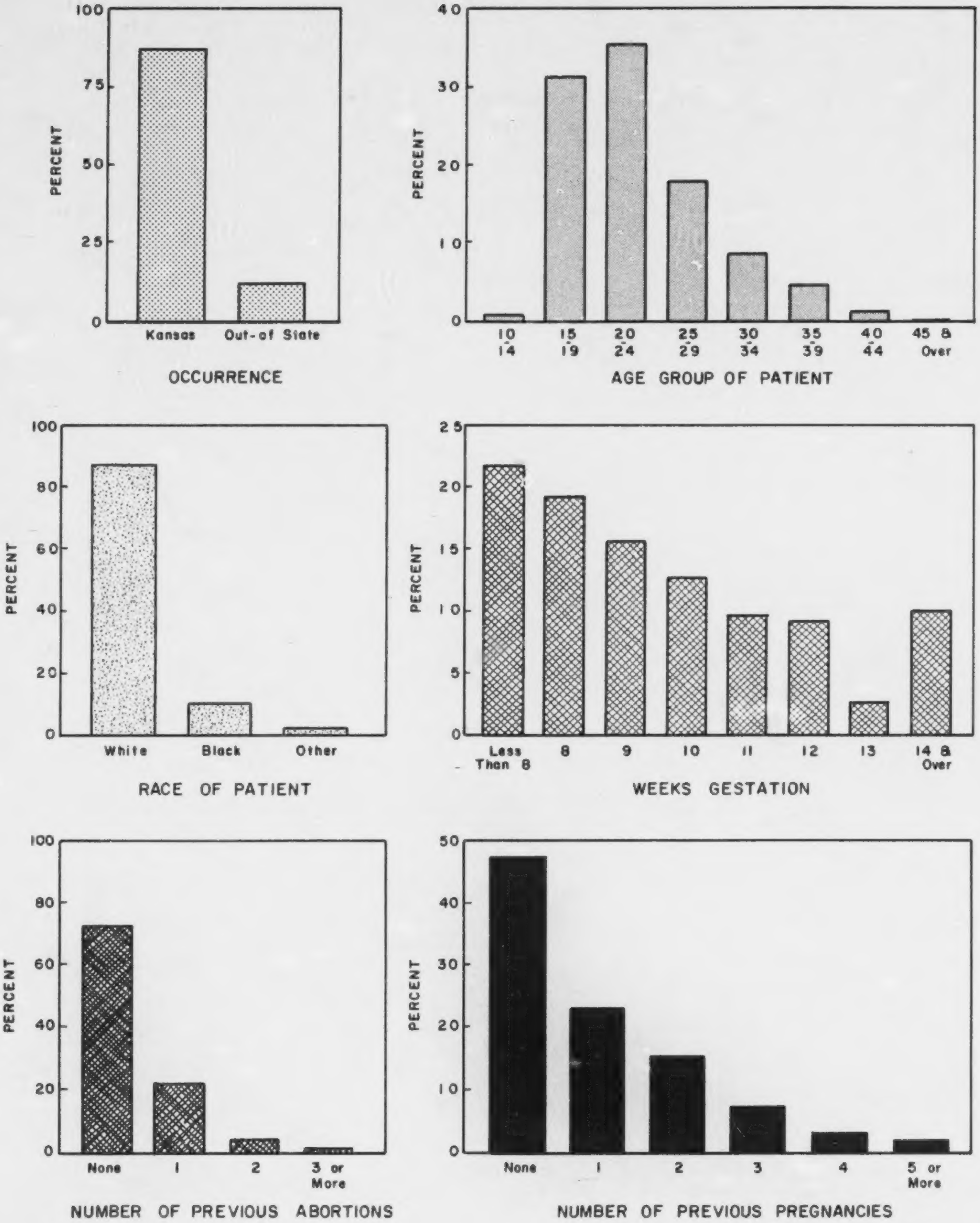
Figure 8

Of the total number of live births to mothers under 20, 42.3 percent were out-of-wedlock. Further, nearly half of the out-of-wedlock births (40.5 percent) were to mothers under 20.

Age-specific out-of-wedlock birth ratios reveal that 41.8 percent of the births to mothers 15 to 19 years of age were out-of-wedlock in 1983. The ratio dropped to 14.0 percent with the next age group, 20-24 years.

BIRTH-RELATED MORTALITY

REPORTED INDUCED ABORTIONS BY SELECTED CHARACTERISTICS, KANSAS, 1983



Residence data.

Figure 9

BIRTH-RELATED MORTALITY

This section examines mortality as it relates to pregnancy, childbirth, and infancy. For discussion purposes it is divided into five subdivisions: (1) induced abortions; (2) fetal deaths (stillbirths); (3) Perinatal Period III mortality; (4) infant deaths; and (5) maternal deaths.

INDUCED ABORTIONS

The Kansas liberalized abortion law was enacted in July, 1970, and from that time through 1983, 152,586 abortions were reported in Kansas. There were 9,844 abortions reported in Kansas in 1983.

The number of abortions reported in Kansas from 1971 to 1983 are shown below. The decline in the number of abortions reported in Kansas in 1974 and 1975 is attributable to the reduction in the number of out-of-state residents having abortions performed in Kansas since the 1973 United States Supreme Court ruling which legalized abortion in all states. The number of abortions reported in Kansas in 1983 represented an 11.4 percent decrease from the 1982 total of 11,107.

Number of Abortions Reported in Kansas by Year

Year	Number
1983.......	9,844
1982.......	11,107
1981.......	12,137
1980.......	13,381
1979.......	13,901
1978.......	10,904
1977.......	10,898
1976.......	11,597
1975.......	10,860
1974.......	10,871
1973.......	12,612
1972.......	12,248
1971.......	9,472

Summary statistics are available only for those 7,873 abortions reported by hospitals and clinics participating in our abortion reporting system during 1983.

In 1983, 4,655 abortions or 59.1 percent of the 7,873 reported in the State, were performed for Kansas residents. Of the 3,218 nonresidents who had abortions in Kansas, 87.9 percent (2,828) were Missouri residents. Residents from other states included those from Illinois (124), Oklahoma (90), Nebraska (75), Iowa (53) and Texas (10). Thirty-eight patients represented other states.

Kansas Residence Summary:

The following analysis refers to the 5,329 abortions reported for Kansas residents, regardless of where the abortion occurred.

Occurrence: In 1983, the Kansas Department of Health and Environment received statistics on 674 abortions performed in other states for Kansas residents. Of those 674 abortions, 549 (or 81.5 percent) occurred in Missouri, 96 (or 14.2 percent) occurred in Oklahoma, and 25 (or 3.7 percent) occurred in Nebraska.

Age of Patient: Most reported abortions were performed in the 15-19 and 20-24 age groups as shown in Figure 9. Enumerated below are the number of abortions by age group of patient, percent distribution and age-specific abortion ratios (number of abortions reported per thousand live births for a given age group.) Induced abortions by county of residence and age group of patient in 1983 are given in Appendix Table 28.

Abortions: Distribution by Age Group of Patient and Age-Specific Ratios

Age Group	Number	Percent	Ratio**
Total	5,329	100.0	...
10-14.	47	0.9	*
15-19.	1,664	31.2	335.1
20-24.	1,883	35.4	130.8
25-29.	949	17.8	72.4
30-34.	464	8.7	75.5
35-39.	248	4.7	163.4
40-44.	65	1.2	398.8
45 and Over . .	6	0.1	*
N.S.	3	...	...

**Age-specific abortion ratios are expressed as the number of abortions per 1,000 live births for a given age group.

Race: Most of the abortion patients, 89.3 percent, in 1983 were white. Black patients represented 10.6 percent, and other races constituted 2.1 percent. Race was not stated in 60 cases.

Marital Status of Patient: Of the 5,329 abortion patients residing in Kansas in 1983, 4,192 or 79.4 percent, were not married; 1,085 or 20.6 percent were married and 52 patients did not report their marital status.

Number of Previous Abortions: In 1983, 3,876 or 73.0 percent, of the patients had no previous abortions. Twenty-one (21.2) percent, or 1,124, had one previous abortion, 4.5 percent (241) had two previous abortions, and 1.3 percent (68) had three or more previous abortions. In 20 cases the number of previous abortions was not stated.

Number of Previous Pregnancies: Forty-eight (47.6) percent (or 2,532) of the patients reported no previous pregnancies, and 23.1 percent (1,225) reported one previous pregnancy. Sixteen (15.7) percent (833) had two previous pregnancies, 13.6 percent (724) reported three or more previous pregnancies, and 15 patients did not report the number of previous pregnancies.

Method of Abortion: Ninety-seven (96.6) percent (5,132) of the abortions were performed by suction curettage. Sharp curettage was utilized in 70 cases, and intra-uterine prosta-glandin instillation was performed in 26 cases. In 86 cases, other methods were used, and 15 cases did not report the method of abortion.

Weeks Gestation: Most abortions (90.0 percent) were performed within the first three months of pregnancy, or prior to the fourteenth week of gestation. Only 530, or 10.0 percent, were performed later than the thirteenth week after conception, with 71 not stated as to weeks gestation.

FETAL DEATHS (Stillbirths)

There were 296 fetal deaths recorded for Kansas residents in 1983, representing an 11.9 percent decrease from the 1982 total of 336. The fetal death rate in 1983 was 7.3 per 1,000 total births, a decrease of 11.0 percent from the 1982 rate of 8.2. The fetal death rate has declined by 36.0 percent from the decade high of 11.4 in 1974. (Table 29 in the Appendix shows the number of fetal deaths by county of residence in 1983.)

Cause of Death: In 1983, 13.9 percent of the fetal deaths were attributable to compression of umbilical cord (41). Other common causes of fetal deaths were: placental separation and hemorrhage (28), abnormalities of the placenta (22), premature rupture of membrane (15), and extreme immaturity (15). (Intentionally aborted fetuses which weigh more than 350 grams are not included as fetal deaths in this report.)

Weight: Fetuses weighing between 351 and 2,000 grams (12.4 oz. to 4 lb. 6 oz.) constituted 60.5 percent of the fetal deaths in 1983. Seventy (70.3) percent of all fetal deaths weighed less than 2,500 grams (5 lb. 8 oz.).

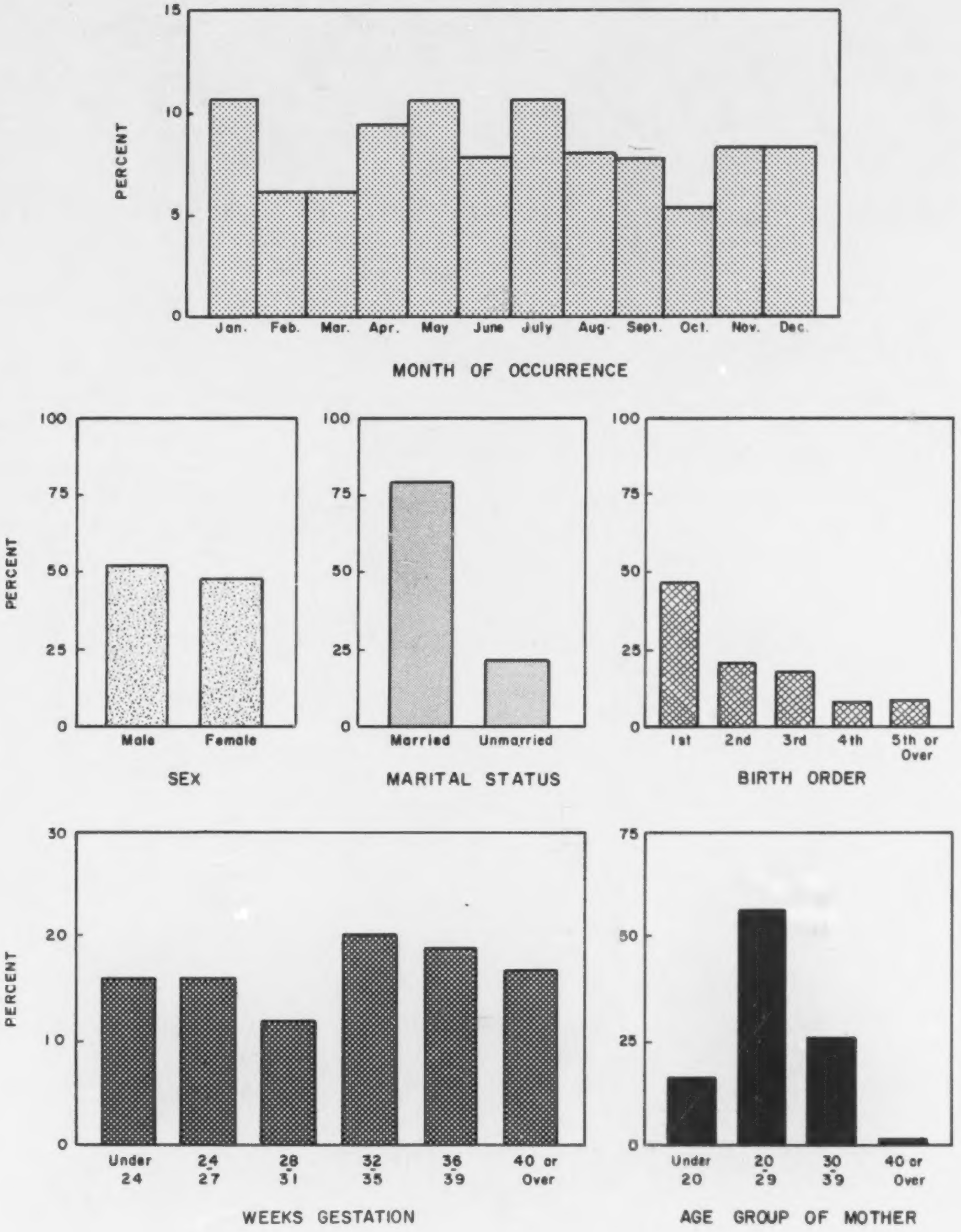
Race: While 90.2 percent of the mothers of infants born in 1983 were white, 84.1 percent of the fetal deaths involved women of this race, indicating a somewhat greater fetal death rate for nonwhite races.

Fetal Deaths: Distribution by Age Group of Mother and Age-Specific Ratios

Age Group	Number	Percent	Ratio**
Total	296	100.0	...
10-14	-	-	-
15-19	49	16.6	9.9
20-24	85	28.7	5.9
25-29	82	27.7	6.3
30-34	57	19.3	9.3
35-39	19	6.4	12.5
40-44	3	1.0	18.4
45 and Over	1	0.3	*

**Age-specific fetal death ratios are expressed as the number of fetal deaths per 1,000 live births for a given age group.

FETAL DEATHS BY SELECTED CHARACTERISTICS
KANSAS, 1983



Residence data.

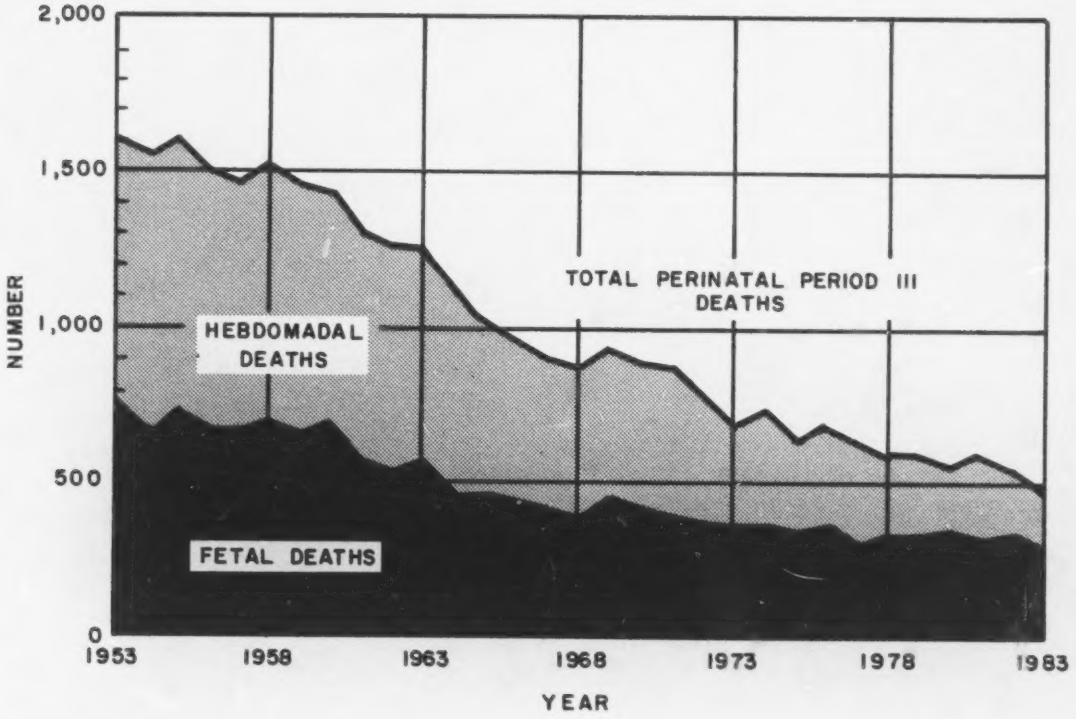
Figure 10

Other Characteristics: Selected characteristics of fetal deaths in 1983 are outlined in Figure 10. Viewing the month of occurrence, 10.8 percent of the fetal deaths occurred in January, May and July. No particular seasonal or monthly patterns were evident. As a comparison, 51.3 percent of the live births in 1983 were males while 51.7 percent of the fetal deaths for the year were male fetuses. Twenty-one percent of all fetal deaths were from out-of-wedlock pregnancies. The largest percentage of fetal deaths (46.6 percent) occurred with first births, with the incidence declining with higher birth order. Thirty-six (35.8) percent of the fetal deaths occurred after 35 weeks of gestation.

PERINATAL PERIOD III MORTALITY

Perinatal Period III mortality refers to the aggregated total of fetal deaths and hebdomadal deaths (deaths which occur prior to the 7th day of life).

PERINATAL PERIOD III MORTALITY
KANSAS, 1953-1983



Residence data.

Figure 11

Since 1955 there has been a general downward trend in the number of Perinatal Period III deaths. The number of deaths decreased from 1,604 in 1955 to 498 in 1983. A graphic representation of Perinatal Period III mortality which occurred between 1953 and 1983 is presented in Figure 11.

Table 5
Perinatal Period III Mortality
Kansas, Selected Years, 1953-1983

Year	Fetal Deaths*	Hebdomadal Deaths	Perinatal Period III Deaths	
			Number	Rate
1983........	296	202	498	12.2
1982........	336	234	570	13.9
1981........	316	264	580	14.0
1980........	340	226	566	13.8
1979........	330	260	590	15.0
1978........	331	254	585	15.8
1977........	308	335	643	17.3
1976........	364	310	674	18.9
1975........	341	304	645	18.9
1974........	379	354	733	22.2
1973........	355	342	697	21.6
1972........	375	410	785	23.4
1971........	380	506	886	24.3
1970........	423	477	900	23.3
1969........	456	480	936	24.9
1965........	466	550	1,016	25.6
1961........	555	763	1,318	26.1
1957........	672	806	1,478	27.5
1953........	789	814	1,603	30.4

*Criteria for reporting fetal deaths changed from twenty weeks gestation to a fetal weight of more than 350 grams in 1963.

Residence data.

Examining the components which constitute Perinatal Period III mortality in Table 5, both the numbers of fetal deaths and hebdomadal deaths declined during the 1953 to 1983 period. Fetal deaths accounted for 62.5 percent fewer deaths in 1983 than they did in 1953, and hebdomadal deaths decreased by 75.2 percent. (Perinatal Period III deaths by county of residence are given in Appendix Table 29.)

INFANT DEATHS

An infant death is defined as a death of a liveborn infant who is under one year of age. Below are the major components, or stages of infancy, which constitute the first year of life, and deaths which occur during that time are hereafter classified in a like manner.

Hebdomadal deaths - occur prior to the seventh day of life.

Post-hebdomadal deaths - occur from 7 through 27 days after birth.

Neonatal deaths - occur prior to the twenty-eighth day of life.

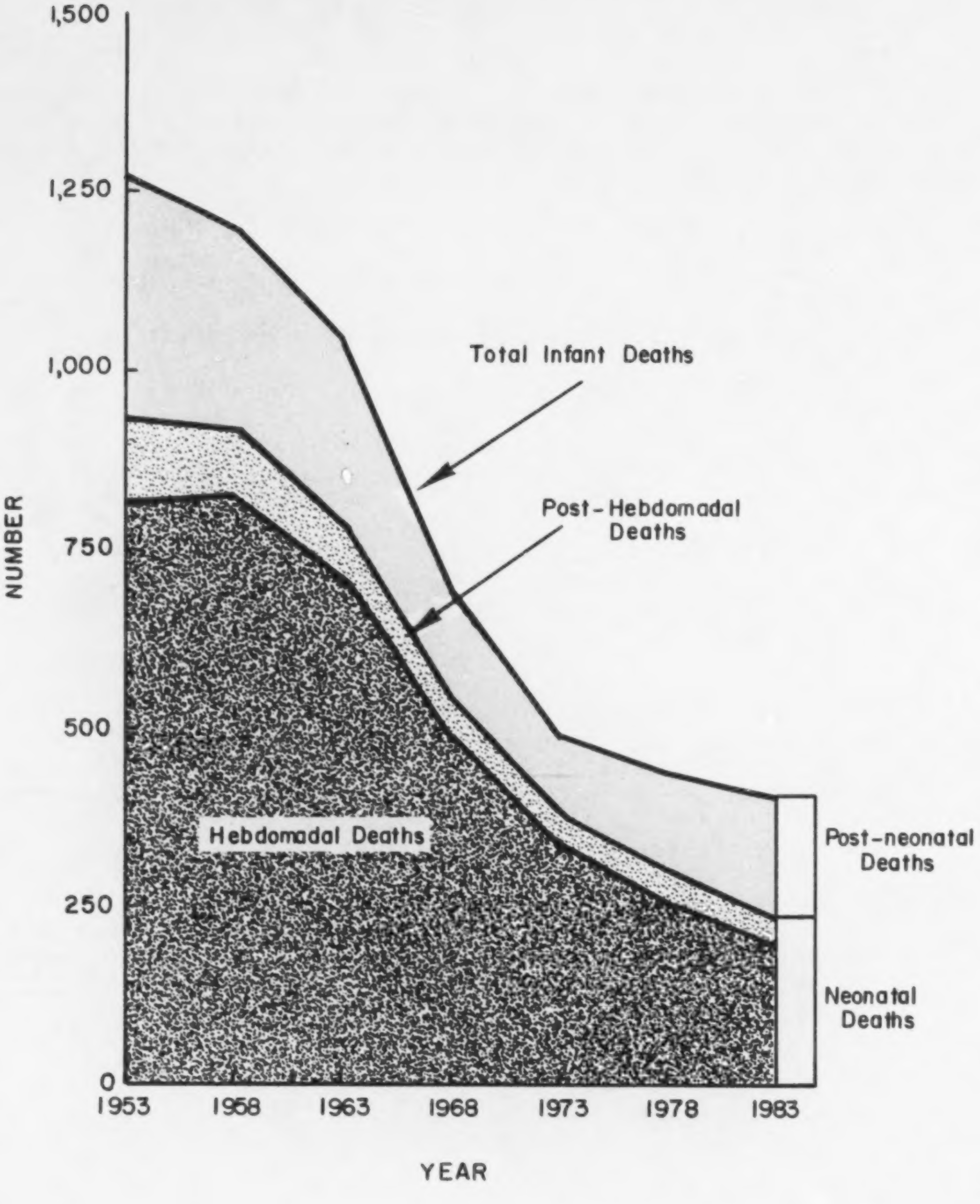
Post-neonatal deaths - occur after 27 days but prior to one year after birth.

These stages overlap in that neonatal deaths represent the total number of hebdomadal and post-hebdomadal deaths. Infant deaths are the sum of neonatal deaths and post-neonatal deaths.

In 1983, there were 406 infant deaths in Kansas. The number of infant deaths, as graphically presented in Figure 12, declined 68.0 percent from 1953 to 1983. Expressed as a rate per thousand live births, infant deaths dropped from 24.5 in 1953 to 10.1 in 1983. By comparison the estimated infant mortality rate for the United States was 10.9 in 1983. The component stages of infant deaths, neonatal deaths (including the hebdomadal and post-hebdomadal periods) and post-neonatal deaths, declined in Kansas in a somewhat parallel manner during the 1953-1983 time period, with the margin between the two narrowing slightly in later years. Neonatal deaths totaled 931 in 1953 compared to 237 in 1983, a 74.5 percent decline. Post-neonatal deaths concurrently dropped by 50.0 percent, from 338 in 1953 to 169 in 1983. (Table 30 in the Appendix shows the number of infant deaths by components and county of residence in 1983.)

Cause of Death: "Congenital anomalies" was the most common cause of infant death and accounted for 94 or 23.2 percent of all infant deaths. "Respiratory distress syndrome and other respiratory conditions" represented 61 or 15.0 percent of all infant deaths and was the second leading cause. All causes of infant death by age group are listed in Table 6.

INFANT DEATHS BY COMPONENT
KANSAS, SELECTED YEARS, 1953-1983



Residence data.

Figure 12

Table 6
Infant Deaths by Cause of Death and Age Group of Infant
Kansas, 1983

Cause of Death (ICD Code)	Age Group of Infant						
	Under 1 day	1-6 days	Under 7 days[a]	7-27 days	Under 28 days[b]	28-364 days	Under 1 year
All Causes	136	66	202	35	237	169	406
Infectious and Parasitic Diseases (001-139)	1	1	2	-	2	5	7
Other Diseases and Disorders (140-739)	1	3	4	5	9	51	60
Congenital Anomalies (740-759)	25	27	52	12	64	30	94
Certain Conditions Originating in the Perinatal Period (760-779)	109	35	144	18	162	11	173
·Maternal Conditions of Pregnancy and Childbirth (760-761, 763-764)	15	1	16	1	17	-	17
·Complications of Placenta, Cord and Membranes (762)	6	-	6	-	6	-	6
·Immaturity (765)	32	3	35	1	36	-	36
·Birth Trauma (767)	2	6	8	2	10	-	10
·Hypoxia and Birth Asphyxia (768)	15	5	20	1	21	-	21
·Respiratory Distress Syndrome and Other Respiratory Conditions (769-770)	28	15	43	8	51	10	61
·Infections Specific to Perinatal Period (771)	3	2	5	1	6	1	7
·Fetal and Neonatal Hemorrhage (772)	-	2	2	1	3	-	3
·Other (773-779)	8	1	9	3	12	-	12
Symptoms and Ill-defined Conditions (780-799)	-	-	-	-	-	61	61
·Sudden Infant Death Syndrome (798)	-	-	-	-	-	59	59
·Other (780-797, 799)	-	-	-	-	-	2	2
External Causes of Injury and Poisoning (E800-E999)	-	-	-	-	-	11	11

[a] Hebdomadal Deaths
[b] Neonatal Deaths

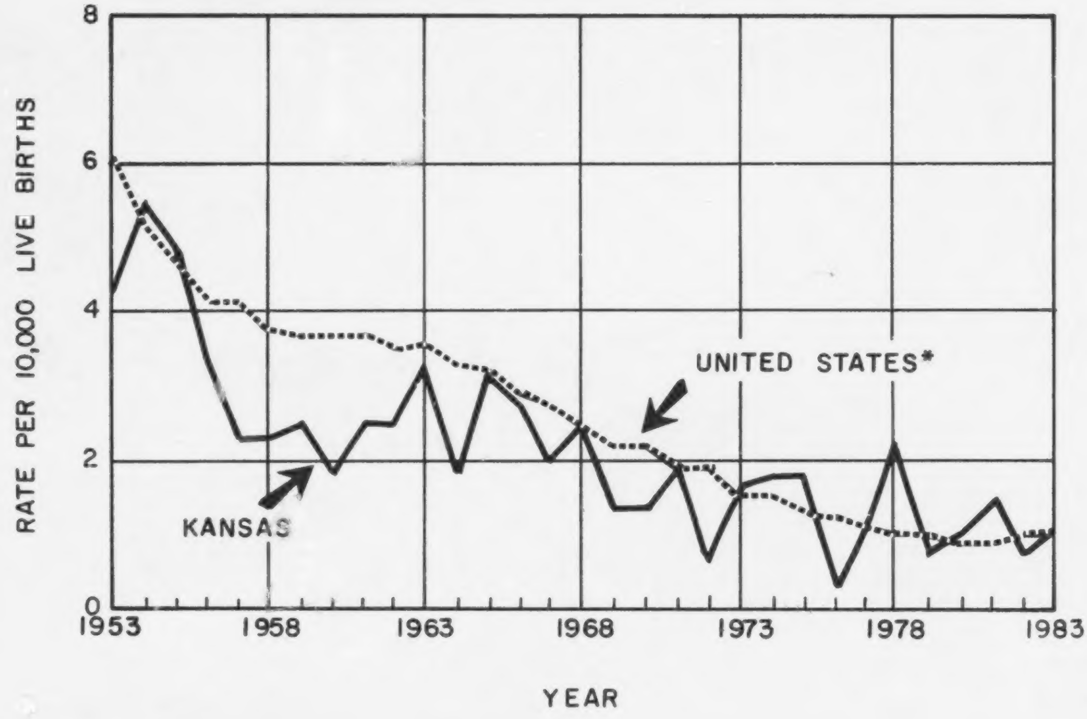
Residence data.

MATERNAL DEATHS

Maternal deaths are those attributable to complications of pregnancy, childbirth or the puerperium, based on the certified cause of death listed on the death certificate.

During 1983, 4 maternal deaths occurred to Kansas residents. Maternal mortality rates, expressed as the number of maternal deaths per ten thousand live births, for Kansas and the nation declined considerably between 1953 and 1983 as illustrated in Figure 13. While the U.S. rate showed a steady decline, the descent of Kansas' rate was somewhat more erratic. Overall, the rate of maternal deaths in Kansas was generally below that of the United States during that period. The maternal death rate for Kansas in 1983 was 1.0, a 76.2 percent decrease from the 1953 maternal death rate of 4.2.

MATERNAL MORTALITY RATES
KANSAS AND THE UNITED STATES, 1953-1983



*1982 and 1983 maternal mortality rates represent provisional data from the National Center for Health Statistics.

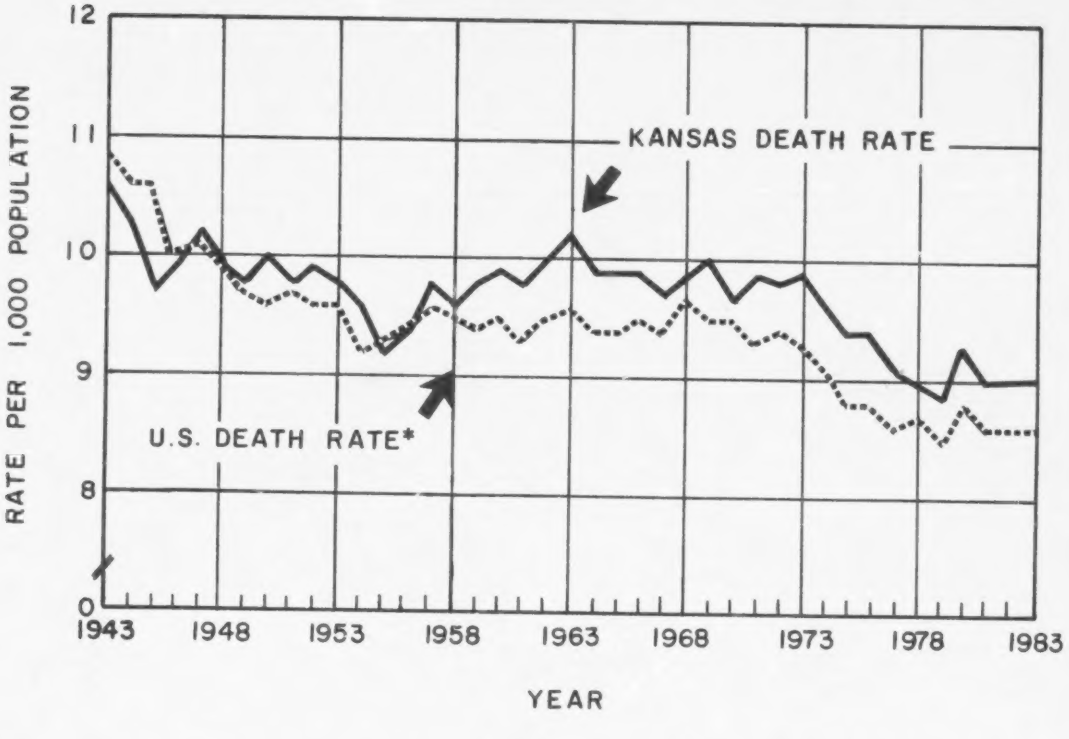
Figure 13

GENERAL MORTALITY

DEATHS

A total of 21,816 resident deaths were recorded during 1983, representing a 0.5 percent increase from the 21,700 deaths recorded in 1983. The Kansas death rate in 1983 remained unchanged from the previous year at 9.0 per thousand population. As illustrated in Figure 14, the Kansas death rate has remained relatively stable between the years 1945 and 1983, not rising above 10.6 (1943) nor falling below 8.9 (1979).

DEATH RATES
KANSAS AND THE UNITED STATES, 1943-1983



*1982 and 1983 United States death rates represent provisional data from the National Center for Health Statistics.

Residence data.

Figure 14

The Kansas death rate in 1983 was 4.7 percent higher than the estimated national death rate of 8.6. During the 1963-1983 period the Kansas rate has been, on the average, 4.5 percent higher than the national rate. It should be noted however, that the age distribution of the population has a significant bearing on the level of the crude death rate, and the percentage of the population 65 years and older is higher in Kansas than for the nation as a whole. On this basis, plus the observed higher than average life expectancy of Kansas residents, it may be assumed that the death rate in Kansas compares favorably with the national rate.

DEATH RATES BY COUNTY OF RESIDENCE
KANSAS, 1983

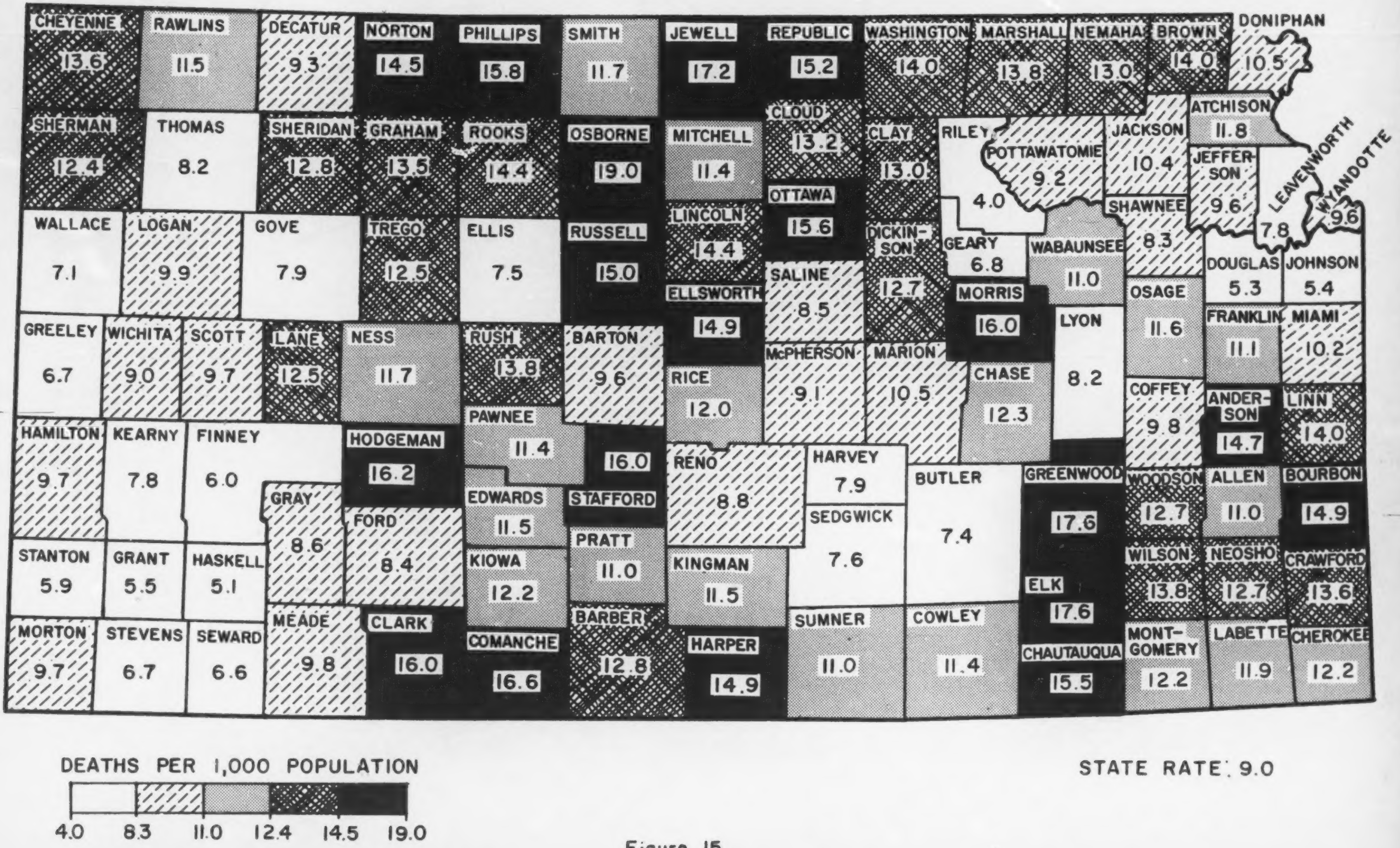
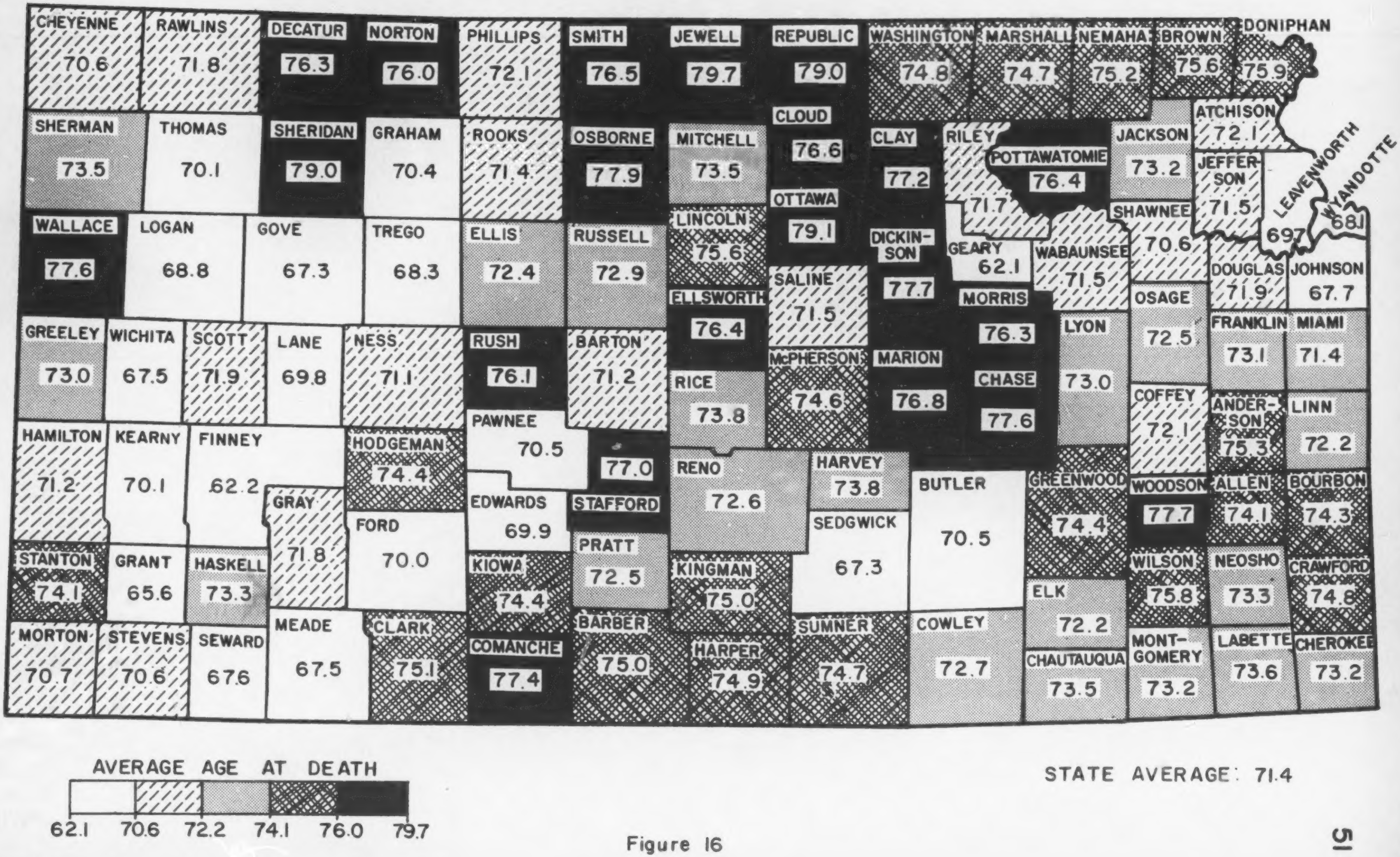


Figure 15

AVERAGE AGE AT DEATH
BY COUNTY OF RESIDENCE, KANSAS, 1983



STATE AVERAGE: 71.4

Figure 16

Death rates by county of residence for 1983 are shown in Figure 15. Riley County had a low rate of 4.0 per 1,000 population, while Osborne County had a high of 19.0. The difference in age distribution of the county population, as well as chance fluctuations when relatively small numbers are involved, should be taken into account when making county level crude death rate comparisons. (The number of deaths and respective rates for 1979-1983 on a county of residence basis are given in Appendix Table 31.)

Age, Race and Sex of Decedent

The average age at death of Kansas residents in 1983 was 71.4 years. As illustrated in Figure 16, 30 counties had an average age at death of 75 years or more. (The number of deaths by age group and average age at death by county of residence are given in Appendix Table 32.)

Ninety-five (94.8) percent of the Kansas decedents in 1983 were white, 4.8 percent were black and less than one percent were of other races. The average age at death for the white population was 71.9, eight years older than that of the black population, whose average age at death was 63.9. Excepting the 1-4 age group and the two oldest age groups, male deaths exceeded female deaths by a considerable margin. The distribution of 1983 Kansas resident deaths by age group, race, sex and average age at death is presented in Table 7.

Leading Causes of Death

The Kansas Department of Health and Environment has been utilizing the Automated Classification of Medical Entities (ACME) System on death certificates since January of 1980. This software system, developed by the National Center for Health Statistics (NCHS), determines the underlying (or principal) cause of death using multiple cause of death coding in accordance with the Ninth Revision of the Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death (ICD-9) published by the World Health Organization. Thus, the coder no longer selects the underlying cause but assigns a code to all causes of death listed on the death certificate and then the underlying cause is determined through a computerized set of decision rules.

This discussion is not exhaustive of all causes of death of Kansas residents, rather it highlights the major causes in terms of magnitude of numbers of deaths from particular causes. Given in Table 8 are selected causes of death by age group of Kansas residents that died in 1983. (The number of deaths in Kansas from the twenty leading causes of death by county of residence is given in Appendix Table 32.)

The two leading causes of death in Kansas, heart disease and malignant neoplasms, had average ages at death of 76.6 and 69.3, respectively. Atherosclerosis, with an average age at death of 85.7 years, had the highest average age at death of any of the leading causes of death.

Table 7
Deaths by Race and Sex, by Age Group and Average Age at Death
Kansas, 1983

Race and Sex	Total	Age Group												
		Under 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 & Over	N.S.	Average Age at Death
Deaths-All Races....	21,816	406	89	86	392	398	450	1,018	2,606	4,766	6,252	5,351	2	71.4
Male.............	11,502	239	43	60	281	279	291	638	1,630	2,918	3,220	1,902	1	68.3
Female...........	10,314	167	46	26	111	119	159	380	976	1,848	3,032	3,449	1	74.9
White...............	20,671	349	79	78	362	361	396	936	2,396	4,540	5,999	5,174	1	71.9
Male.............	10,889	209	38	52	261	252	255	593	1,507	2,790	3,101	1,831	-	68.7
Female...........	9,782	140	41	26	101	109	141	343	889	1,750	2,898	3,343	1	75.4
Black...............	1,058	50	10	5	26	31	47	71	200	213	237	167	1	63.9
Male.............	565	28	5	5	19	24	31	40	115	119	111	67	1	61.0
Female...........	493	22	5	-	7	7	16	31	85	94	126	100	-	67.2
Indian..............	48	3	-	-	2	2	3	6	7	7	12	6	-	*
Male.............	30	-	-	-	1	2	2	4	7	5	6	3	-	*
Female...........	18	3	-	-	1	-	1	2	-	2	6	3	-	*
Other...............	35	4	-	3	2	4	2	5	3	6	2	4	-	*
Male.............	14	2	-	3	-	1	1	1	1	4	-	1	-	*
Female...........	21	2	-	-	2	3	1	4	2	2	2	3	-	*
Not Stated..........	4	-	-	-	-	-	2	-	-	-	2	-	-	*
Male.............	4	-	-	-	-	-	2	-	-	-	2	-	-	*
Female...........	-	-	-	-	-	-	-	-	-	-	-	-	-	*

Residence data.

Table 8
Selected Causes of Death by Age Group And Average Age at Death
Kansas, 1983

Selected Causes of Death (ICD Code)	Total	Age Group												
		Under 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 & Over	N.S.	Average Age at Death
All Causes	21,816	406	89	86	392	398	450	1,018	2,606	4,766	6,252	5,351	2	71.4
Selected Causes	18,984	136	65	64	358	345	378	916	2,363	4,250	5,450	4,657	2	n.a.
Tuberculosis (010-018)	5	-	-	-	-	-	-	-	1	1	3	-	-	71.6
Malignant Neoplasms (140-208)	4,564	2	8	14	17	47	111	354	888	1,389	1,212	522	-	69.3
Diabetes Mellitus (250)	383	-	-	-	2	6	9	17	44	107	132	66	-	72.9
Hypertension (401, 403)	80	-	-	-	-	-	2	1	11	13	25	27	1	77.8
Heart Disease (390-398, 402, 404-429)	8,302	13	4	6	13	24	81	307	913	1,807	2,639	2,495	-	76.6
Cerebrovascular Disease (430-438)	1,752	2	1	-	6	7	22	33	122	289	604	665	1	79.2
Atherosclerosis (440)	367	-	-	-	-	-	-	3	6	33	90	235	-	85.7
Pneumonia and Influenza (480-487)	663	13	4	-	3	6	4	11	39	76	184	323	-	79.4
Chronic Obstructive Pulmonary Diseases (490-496)	880	-	1	1	-	3	6	26	117	302	310	114	-	73.4
Ulcer of Stomach and Duodenum (531-533)	70	-	-	-	-	-	2	1	11	15	22	19	-	75.6
Chronic Liver Disease and Cirrhosis (571)	173	-	1	-	-	5	12	26	50	51	20	8	-	62.5
Nephritis, Nephrotic Syndrome and Nephrosis (580-589)	224	1	-	-	-	2	2	6	20	46	73	74	-	77.4
Congenital Anomalies (740-759)	139	94	21	1	4	4	4	2	3	4	1	1	-	8.3
Accidents (E800-E949)	962	7	23	36	225	135	72	82	91	83	108	100	-	46.3
Suicide (E950-E959)	296	-	-	3	54	72	27	40	39	31	24	6	-	44.6
Homicide and Legal Intervention (E960-E969)	124	4	2	3	34	34	24	7	8	3	3	2	-	33.1

Residence data.

Examining the ten leading causes of death for Kansas residents in 1983, Table 9 shows not only the number of deaths attributable to each cause but also the disease-specific death rates and average age at death for males and females. Table 10 gives sex and race breakdowns for the ten leading causes of death and Table 11 provides comparisons of deaths for Kansas and the United States for selected leading causes by number and rate for 1983.

Table 9
Ten Leading Causes of Death by Sex
By Number, Rate and Average Age at Death
Kansas, 1983

Leading Causes of Death (ICD Code)	Number of Deaths			Disease-Specific Death Rate			Average Age at Death		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Causes.................	21,816	11,502	10,314	898.1	926.6	868.3	71.4	68.3	74.9
Heart Disease (390-398, 402, 404-429)........	8,302	4,378	3,924	341.8	352.7	330.3	76.6	73.2	80.3
Malignant Neoplasms (140-208)......................	4,564	2,468	2,096	187.9	198.8	176.4	69.3	69.1	69.6
Cerebrovascular Disease (430-438)......................	1,752	700	1,052	72.1	56.4	88.6	79.2	76.4	81.0
Accidents (E800-E949)....................	962	660	302	39.6	53.2	25.4	46.3	43.0	53.8
Chronic Obstructive Pulmonary Diseases (490-496)......................	880	603	277	36.2	48.6	23.3	73.4	73.8	72.5
Pneumonia and Influenza (480-487)......................	663	327	336	27.3	26.3	28.3	79.4	76.2	82.6
Diabetes Mellitus (250)..........................	383	154	229	15.8	12.4	19.3	72.9	70.1	74.8
Atherosclerosis (440)..........................	367	142	225	15.1	11.4	18.9	85.7	82.5	87.8
Suicide (E950-E959)....................	296	225	71	12.2	18.1	6.0	44.6	44.8	43.9
Nephritis, Nephrotic Syndrome and Nephrosis (580-589)......................	224	108	116	9.2	9.7	9.8	77.4	76.7	78.0

Note: Rates are based on an estimated distribution of population of 48.9 percent male and 51.1 percent female. This distribution is based upon the "1980 Census of Population and Housing" by the United States Bureau of the Census.

Residence data.

Table 10
Ten Leading Causes of Death by Sex and Race
Kansas, 1983

Sex and Race	Total	Causes of Death										
		Heart Disease	Malignant Neoplasms	Cerebrovascular Disease	Accidents	Chronic Obstructive Pulmonary Diseases	Pneumonia and Influenza	Diabetes Mellitus	Atherosclerosis	Suicide	Nephritis Nephrotic Syndrome and Nephrosis	All Other Causes
Total........	21,816	8,302	4,564	1,752	962	880	663	383	367	296	224	3,423
Male.........	11,502	4,378	2,468	700	660	603	327	154	142	225	108	1,737
White.......	10,889	4,192	2,317	656	631	585	315	142	139	214	100	1,598
Black.......	565	170	142	42	24	15	11	12	3	10	5	131
Indian......	30	8	9	2	3	2	1	-	-	-	2	3
Other.......	14	6	-	-	2	1	-	-	-	1	1	3
Unknown.....	4	2	-	-	-	-	-	-	-	-	-	2
Female.......	10,314	3,924	2,096	1,052	302	277	336	229	225	71	116	1,686
White.......	9,782	3,751	1,994	999	282	267	322	214	218	69	100	1,566
Black.......	493	162	95	51	17	10	12	15	7	-	15	109
Indian......	18	7	3	-	1	-	-	-	-	-	1	6
Other.......	21	4	4	2	2	-	2	-	-	2	-	5
Unknown.....	-	-	-	-	-	-	-	-	-	-	-	-

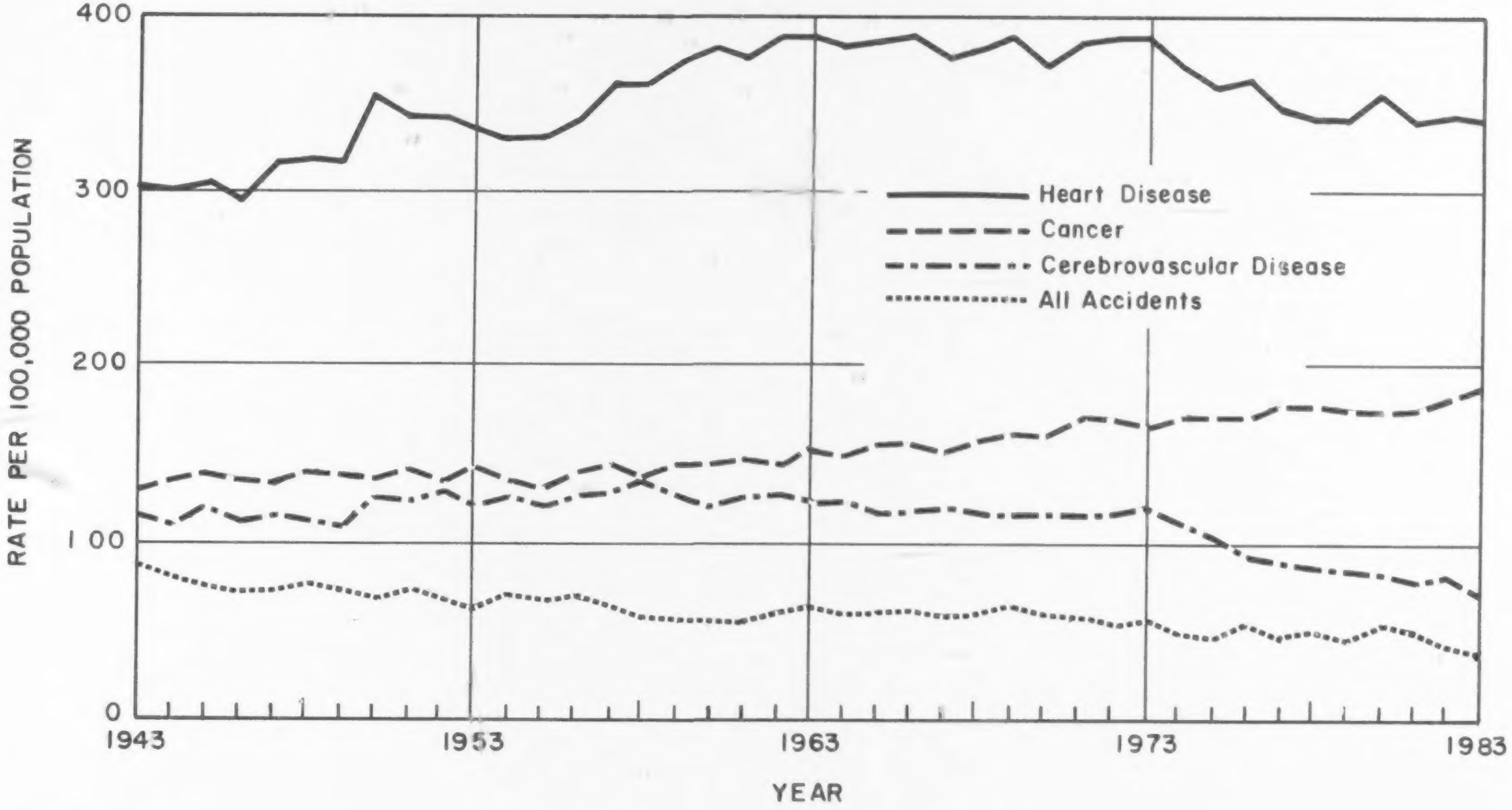
Table 11
Selected Leading Causes of Death by Number and Rate
Kansas and the United States, 1983

Cause of Death (ICD Code)	Kansas		United States* (Estimates)	
	Number	Rate	Number	Rate
All Causes	21,816	898.1	201,319	858.9
Heart Disease (390-398, 402, 404-429)	8,302	341.8	76,479	326.3
Malignant Neoplasms (140-208)	4,564	187.9	44,215	188.6
Cerebrovascular Disease (430-438)	1,752	72.1	15,629	66.7
Accidents (E800-E949)	962	39.6	9,016	38.5
Chronic Obstructive Pulmonary Diseases (490-496)	880	36.2	6,630	28.3
Pneumonia and Influenza (480-487)	663	27.3	5,356	22.9
Diabetes Mellitus (250)	383	15.8	3,551	15.2
Atherosclerosis (440)	367	15.1	2,592	11.1
Suicide (E950-E959)	296	12.2	2,798	11.9
Nephritis, Nephrotic Syndrome and Nephrosis (580-589)	224	9.2	1,893	8.1
Aortic Aneurysm (441)	186	7.7	n.a.	n.a.
Certain Conditions Originating in the Perinatal Period (760-779)	175	7.2	1,907	8.1
Chronic Liver Disease and Cirrhosis (571)	173	7.1	2,782	11.9
Congenital Anomalies (740-759)	139	5.7	1,282	5.5
Homicide and Legal Intervention (E960-E978)	124	5.1	1,929	8.2

*United States estimates are from the National Center for Health Statistics and are based on a 10 percent sample.

Residence data.

DEATH RATES FOR LEADING CAUSES OF DEATH KANSAS, 1943-1983



Residence data.

Figure 17

Four Leading Causes: Depicted in Figure 17 are the year by year death rate trends of the four leading causes of death from 1943-1983. The rate of heart disease, the number one cause of death in Kansas, rose considerably from 1943 to 1960. After stabilizing somewhat for the next ten years, the heart disease death rate gradually declined to 340.7 in 1981. The 1983 Kansas rate of 341.8 was 4.8 percent higher than the estimated United States rate of 326.3. The heart disease rate among Kansas men was 352.7 per 100,000 population in 1983 compared to 330.3 among the female population. The male victims of fatal heart disease averaged more than six years younger than female victims.

Cancer was the second-leading cause of death in Kansas in 1983, rising from 135.1 deaths per 100,000 population in 1943 to 187.9 in 1983. The Kansas rate was 0.4 percent lower than the estimated United States rate of 188.6 per 100,000 population. The incidence of terminal cancer was higher for men than for women, as evidenced by the death rates of 198.8 for males and 176.4 for females.

Kansas death rates for cerebrovascular disease, the number three cause of death in 1983, remained between 107.3 and 137.0 from 1943 to 1975. However, the rate dropped to 95.7 in 1976 and 78.6 in 1981. The 1983 Kansas rate of 72.1 was 8.1 percent higher than the estimated United States rate of 66.7. Comparing the number of male and female victims in 1983, 60.0 percent were females, and the sex-specific rate was 88.6 for females and 56.4 for males.

Accidental deaths accounted for 4.4 percent of all deaths in Kansas in 1983, making it the fourth-leading cause during that year. The death rate from accidents declined from 88.2 in 1943 to a record low of 39.6 in 1983. The Kansas accidental death rate was 2.9 percent higher than the estimated United States rate of 38.5.

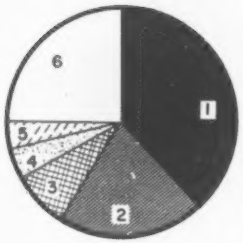
Leading Causes by Age Group: Variations in the most prevalent causes of death by selected age groups are presented in Figure 18. The leading causes of death for each age group are listed in order of magnitude. It is thus noted that in 1983, accidents were the most frequent cause of death for victims between 1 and 44 years of age. Heart disease was more commonly fatal to those persons over 44 years old. Cancer and cerebrovascular disease also claimed more victims of older age groups than of younger. Suicide and homicide had the greatest impact upon persons of the 15-24 and 25-44 categories. Pneumonia-influenza was one of the five leading causes of death of persons 1-4 and over 64 years of age. Chronic obstructive pulmonary disease was more prevalent as a cause of death for persons over 44 years of age.

Heart Disease: The number one cause of death in Kansas, heart disease, claimed 8,302 lives in 1983 and accounted for 38.1 percent of all deaths during the year.

The classifications which constitute heart disease, the number of deaths attributable to each and the respective sex and age group distributions are presented in Table 12.

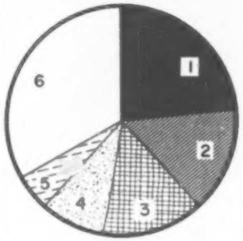
LEADING CAUSES OF DEATH BY AGE GROUP
KANSAS, 1983

ALL AGES



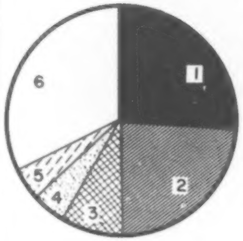
Cause of Death	Number of Deaths
1. Heart Disease	8,302
2. Cancer	4,564
3. Cerebrovascular Disease	1,752
4. Accidents	962
5. Chronic Obstructive Pulmonary Diseases	880
6. Other Causes	5,356
Total Deaths[1/]	21,816

UNDER 1 YEAR



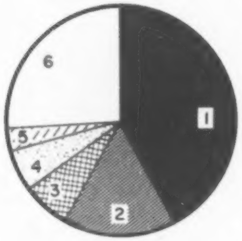
Cause of Death	Number of Deaths
1. Congenital Anomalies	94
2. Respiratory Distress Syndrome and Other Respiratory Conditions	61
3. Sudden Infant Death Syndrome	59
4. Immaturity	36
5. Hypoxia and Birth Asphyxia	21
6. Other Causes	135
Total Deaths	406

1-4 YEARS



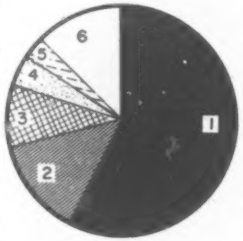
Cause of Death	Number of Deaths
1. Accidents	23
2. Congenital Anomalies	21
3. Cancer	8
4. Heart Disease	4
5. Pneumonia and Influenza	4
6. Other Causes	29
Total Deaths	89

5-14 YEARS



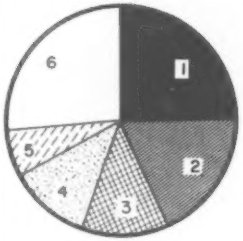
Cause of Death	Number of Deaths
1. Accidents	36
2. Cancer	14
3. Heart Disease	6
4. Other Disorders of Metabolism	5
5. Homicide and Legal Intervention	3
6. Other Causes	22
Total Deaths	86

15-24 YEARS



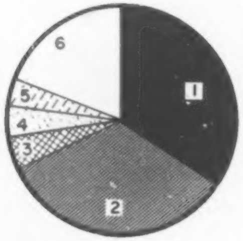
Cause of Death	Number of Deaths
1. Accidents	225
2. Suicide	54
3. Homicide and Legal Intervention	34
4. Cancer	17
5. Heart Disease	13
6. Other Causes	49
Total Deaths	392

25-44 YEARS



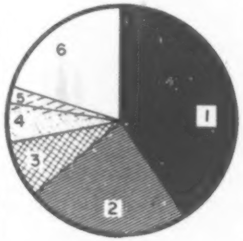
Cause of Death	Number of Deaths
1. Accidents	207
2. Cancer	158
3. Heart Disease	105
4. Suicide	99
5. Homicide and Legal Intervention	57
6. Other Causes	222
Total Deaths	848

45-64 YEARS



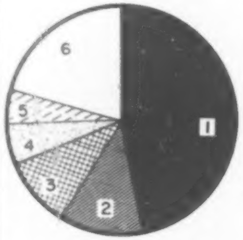
Cause of Death	Number of Deaths
1. Cancer	1,242
2. Heart Disease	1,220
3. Accidents	173
4. Cerebrovascular Disease	155
5. Chronic Obstructive Pulmonary Diseases	143
6. Other Causes	691
Total Deaths	3,624

65-84 YEARS



Cause of Death	Number of Deaths
1. Heart Disease	4,446
2. Cancer	2,[illegible]01
3. Cerebrovascular Disease	893
4. Chronic Obstructive Pulmonary Diseases	612
5. Pneumonia and Influenza	260
6. Other Causes	2,206
Total Deaths	11,018

85 YEARS AND OLDER



Cause of Death	Number of Deaths
1 Heart Disease	2,495
2 Cerebrovascular Disease	665
3 Cancer	522
4 Pneumonia and Influenza	323
5 Atherosclerosis	235
6 Other Causes	1,111
Total Deaths	5,351

[1/] Two deaths by age group of decedent unknown

Residence data

Figure 18

Table 12
Heart Disease Deaths by Age Group and Sex
Kansas, 1983

Cause of Death and Sex (ICD Code)	Total	Age Group										
		Under 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 & Over
Diseases of the Heart (390-398, 402, 404-429).............	8,302	13	4	6	13	24	81	307	913	1,807	2,639	2,495
Male..............................	4,378	6	2	3	10	14	64	252	655	1,173	1,338	861
Female............................	3,924	7	2	3	3	10	17	55	258	634	1,301	1,634
Acute Rheumatic Fever and Chronic Rheumatic Heart Disease (390-398)...........................	63	-	-	-	-	1	4	3	13	15	20	7
Male..............................	27	-	-	-	-	1	2	2	4	7	9	2
Female............................	36	-	-	-	-	-	2	1	9	8	11	5
Hypertensive Heart Disease with or without Renal Disease (402, 404).........................	173	-	-	-	-	-	2	3	15	23	68	62
Male..............................	58	-	-	-	-	-	1	2	9	10	22	14
Female............................	115	-	-	-	-	-	1	1	6	13	46	48
Ischemic Heart Disease (410-414)...........................	6,139	-	-	-	1	11	57	241	719	1,402	1,987	1,721
Male..............................	3,447	-	-	-	-	8	45	210	533	936	1,077	638
Female............................	2,692	-	-	-	1	3	12	31	186	466	910	1,083
Diseases of Pulmonary Circulation (415-417)...........................	163	2	-	2	1	2	2	7	26	43	44	34
Male..............................	62	1	-	1	-	-	2	2	11	20	14	11
Female............................	101	1	-	1	1	2	-	5	15	23	30	23
All Other Forms of Heart Disease (420-429)...........................	1,764	11	4	4	11	10	16	53	140	324	520	671
Male..............................	784	5	2	2	10	5	14	36	98	200	216	196
Female............................	980	6	2	2	1	5	2	17	42	124	304	475

Residence data.

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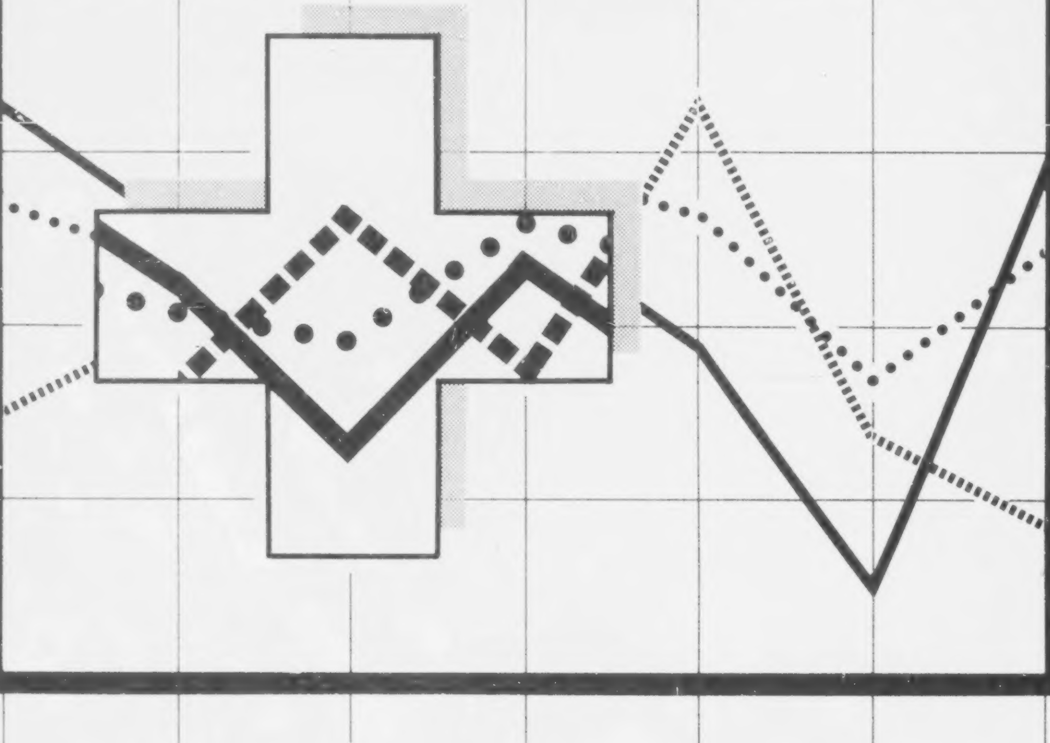
1983 Iowa Accident Facts



Iowa Department of Transportation

Foreward

The format of the vehicle pages in the 1983 report emphasizes the number of **accidents** by vehicle type.

The 1983 summary again includes alcohol-related accident information (including trends, time of day, day of week, and detailed statistics on the driver, vehicle and environment for alcohol-related accidents); collisions by vehicle type; and accident information for each county by road system. In addition, the individual vehicle pages include seat belt usage information developed from the accident data.

Several items should be noted. Accident information concerning the Driver, Machine and Environment for each vehicle type is contained on facing pages. Percentages are based on known information; unknown cases are also noted.

Starting in 1979, Iowa fatality figures include all persons who died as a result of a traffic accident on public roads within 30 days of the accident. Previous traffic fatality figures included all persons who died within one year of the accident. The change was made to conform to nationwide standards for reporting highway fatalities.

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Acknowledgement

The Iowa Department of Transportation wishes to express appreciation to all law enforcement agencies and officers for their work in accident investigation which made this report possible. All information concerning Iowa traffic accidents was taken from report forms provided by investigating officers and drivers involved in accidents.

We hope this information will be of value in analyzing the causes of traffic accidents in Iowa, and that it emphasizes the need for concerned, well-prepared drivers and a safe driving environment.

Prepared by
Office of Driver Safety & Improvement

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Glossary

Traffic accident: Iowa law requires motorists to report any accident which involves one or more vehicles and results in death, personal injury or property damage of at least $500. The information in this report, however, is based only on those accidents which occurred on public roads.

Fatal accident: Accident in which one or more persons are killed.

Personal injury accident: Accident in which no one is killed, but one or more persons are injured.

Property damage accident: Accident in which no one is killed or injured, but there is property damage of $500 or more.

Fatality: Person killed as a result of a traffic accident.

Alcohol-related: An accident where either a driver, bicyclist or pedestrian is listed on the motor vehicle accident report as drinking prior to the accident.

Vehicle miles: Iowa vehicle-mile figures are the estimated total number of miles traveled on Iowa primary and secondary highways, urban and rural roads, and streets by all vehicles during a given period.

Fatality rate: Number of fatalities per 100 million vehicle miles.

Accident rate: Number of accidents per 100 million vehicle miles, unless otherwise stated.

1983: A look at Iowa

Accidents by month		Fatal Accidents by month	Fatalities
61,190		434	510
8,135	Dec.	34	39
5,940	Nov.	22	23
5,458	Oct.	47	53
4,628	Sept.	38	44
4,688	Aug.	50	55
4,800	July	57	68
4,740	June	40	46
4,801	May	40	46
4,135	April	23	30
4,396	March	28	32
4,612	Feb.	25	32
4,857	Jan.	30	42

In Iowa there was...

1 accident every 8.6 minutes

1 driver out of every 19.7 involved in an accident

1.4 lives lost per day because of traffic accidents. (A total of 510 lives were lost in 1983.)

71.4 persons injured per day because of traffic accidents. (A total of 26,050 persons were injured in 1983.)

In Iowa, motor vehicle accidents decreased 0.6 percent in 1983 from the 61,549 accidents recorded in 1982. Fatalities increased 6.3 percent in 1983 from 480 fatalities reported in 1982.

Nationally there were:

18,100,000 motor vehicle accidents
37,971 fatal accidents
42,584 fatalities

Nationally, motor vehicle accidents increased 1.1 percent in 1983, compared to the 18,100,000 accidents in 1982. Fatalities decreased 3.1 percent in 1983 from the 43,945 fatalities reported in 1982.

SUMMARY
Iowa Trends
1970-1983

Year	All Acc.	Fatalities	Persons Injured	Fatal Acc.	Injury Acc.	Vehicle Miles (Million)	Fatality[2] Rate	Fatal[2] Acc. Rate	All[2] Acc. Rate	Licensed Drivers	Motor Vehicle Registrations
1970	87,808	912	33,101	752	22,339	16,053	5.68	4.68	547.0	1,678,262	1,839,530
1971	87,100	828	31,599	681	21,411	16,582	4.99	4.11	525.3	1,704,137	1,916,850
1972	91,918	875	35,484	722	23,814	17,127	5.11	4.22	536.7	1,752,595	2,012,245
1973	96,620	813	35,059	682	24,683	17,691	4.60	3.86	546.2	1,787,169	2,095,330
1974	91,117	685	31,741	583	22,851	17,250	3.97	3.38	528.2	1,846,870	2,178,530
1975	94,825	674	32,802	578	23,082	17,853	3.78	3.24	531.1	1,865,754	2,250,417
1976[1]	98,000	785	34,096	663	24,218	18,441	4.26	3.60	531.4	1,959,150	2,300,721
1977	87,771	640	32,289	561	22,358	19,028	3.36	2.95	461.3	2,085,647	2,356,327
1978	91,213	650	31,631	563	21,651	19,467	3.34	2.89	468.6	2,398,656	2,474,790[3]
1979	86,969	655[4]	29,972	566[4]	20,727	18,959	3.45	2.99	458.7	2,419,501	2,540,547[3]
1980	77,800	626[4]	29,100	541[4]	20,280	18,305	3.42	2.96	425.0	2,408,793	2,554,379[3]
1981	68,263	612[4]	28,776	529[4]	19,945	18,715	3.27	2.83	364.8	2,472,614	2,592,604[3]
1982	61,549	480[4]	25,905	431[4]	17,933	18,194	2.64	2.37	338.3	1,977,911[5]	2,577,994[3]
1983	61,190	510	26,050	434	18,049	19,712	2.59	2.20	310.4	1,998,982	2,542,267[3]

[1] All accident figures for 1976 are estimated except for figures on fatal accidents.

[2] Per 100 million vehicle miles traveled.

[3] Revised by DOT Office of Driver Services to exclude trailers, travel trailers and mobile homes. Vehicles registered to Iowa non-residents are included.

[4] Beginning with 1979, figures for fatalities and fatal accidents are based on persons who died within 30 days of the traffic accident. Previous years' totals included persons who died within one year of the accident.

[5] Drop in number of licensed drivers is due to more accurate method of computation.

[6] As of July 15, 1983

SUMMARY
National Trends
1970-1983

Year	All[1] Acc.	Fatalities	Persons[2] Injured	Fatal Acc.	Vehicle[3] Miles (Billion)	Fatality[4] Rate	Fatal[4] Acc. Rate	All[4],[5] Acc. Rate	Licensed[3],[6] Drivers	Motor Vehicle[3],[6] Registrations
1970	16,400,000[5]	52,627	2,961,000	NA	1,110	4.74	NA	1,477.5	111,542,787	111,242,295
1971	17,000,000[5]	52,542	4,044,000	NA	1,179	4.46	NA	1,441.9	114,425,900	116,330,037
1972	16,600,000[5]	54,589	3,761,000	NA	1,260	4.33	NA	1,317.5	118,414,474	122,556,550
1973	15,600,000[5]	54,052	2,960,000	NA	1,313	4.12	NA	1,188.1	121,545,736	130,024,945
1974	15,600,000	45,196	4,075,000	NA	1,281	3.53	NA	1,217.8	125,426,582	134,899,955
1975	16,500,000	44,525	4,225,000	39,161	1,328	3.35	2.95	1,242.5	129,790,666	137,912,779
1976	16,800,000	45,523	4,107,000	39,747	1,402[5]	3.25[5]	2.84[5]	1,198.3	134,035,641	143,476,236
1977	17,600,000	47,878	4,392,000	42,210[5]	1,467[5]	3.26	2.88[5]	1,199.7	138,120,893	146,973,718
1978	18,300,000	50,331	3,827,000	44,433	1,545[5]	3.26[5]	2.88[5]	1,184.5	140,843,907	153,282,476
1979	18,100,000	51,093[5]	4,248,000[5]	45,223[5]	1,529[5]	3.34	2.96	1,184.4	143,283,995	157,291,431
1980	17,900,000	51,091[5]	3,694,000[5]	45,284[5]	1,528[5]	3.34[5]	2.96[5]	1,171.5	145,295,036	161,490, 159
1981	18,000,000	49,301[5]	5,019,000[5]	44,000[5]	1,550[5]	3.18[5]	2.84[5]	1,153.8	147,075,169[5]	164,287,643[5]
1982	18,100,000[7]	43,945[5]	NA	39,092[5]	1,592[5]	2.78[5]	2.48[7]	1,152.1	150,309,519[5]	159,509,825[5]
1983	18,300,000	42,584[7]	NA	37,971[7]	1,649	2.58[7]	2.30[7]	1,109.8	152,380,000[6]	161,939,000[6]

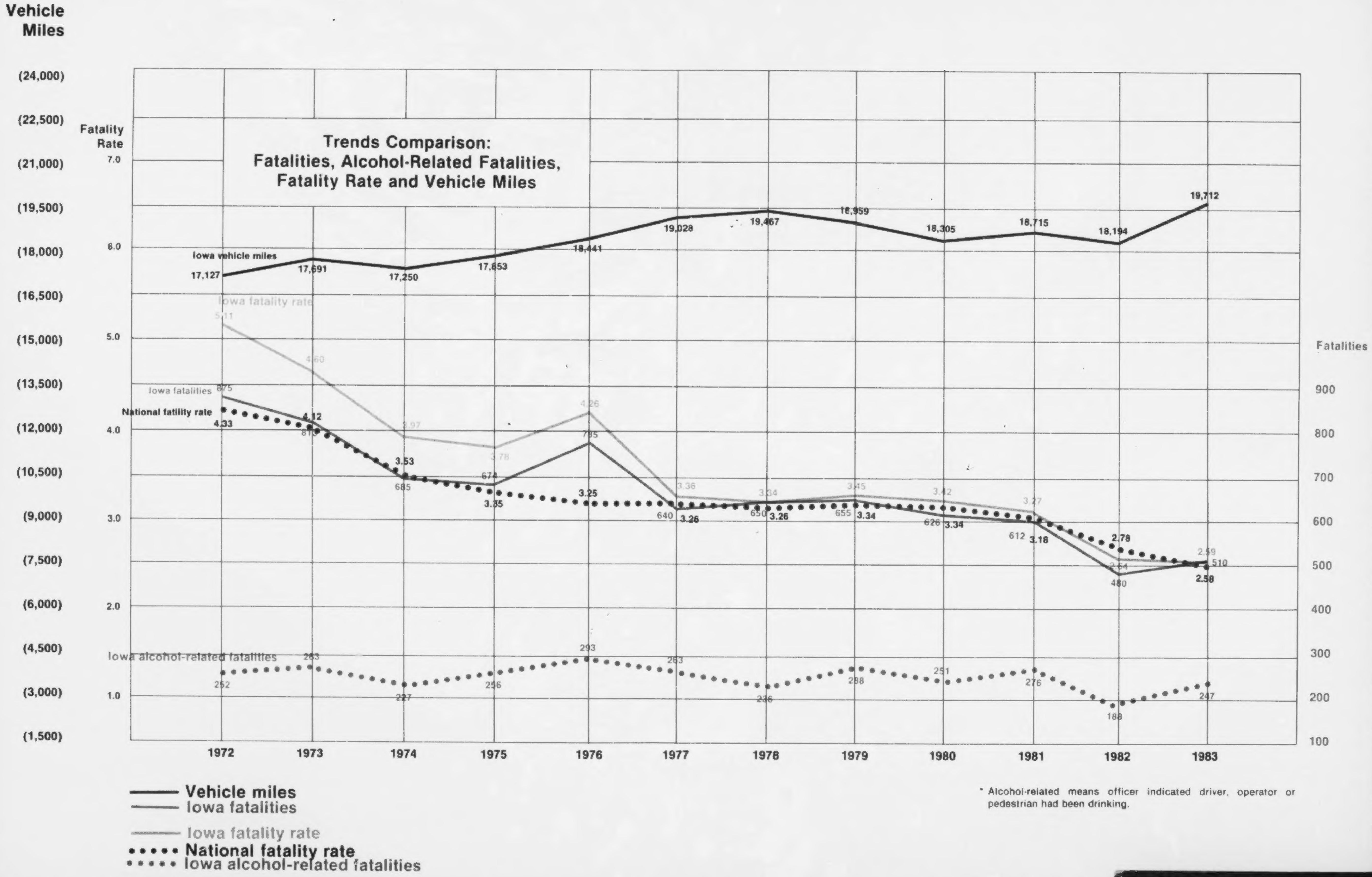
Figures obtained from U.S. Department of Transportation, National Highway Traffic Safety Administration, unless otherwise noted. All rates calculated by the Office of Driver Services.

1 Figures from National Safety Council.
2 National Health Interview System, National Center for Health Statistics.
3 Federal Highway Administration, Highway Statistical Division.
4 Per 100 million vehicle miles traveled.
5 Updated/revised.
6 Estimated.
7 Preliminary.

SUMMARY

Vehicle Miles/ Fatalities

Trends Comparison: Fatalities, Alcohol-Related Fatalities, Fatality Rate and Vehicle Miles



* Alcohol-related means officer indicated driver, operator or pedestrian had been drinking.

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SUMMARY
Drivers/Fatalities: Age/Sex

Age	Licensed Drivers*	Drivers Involved in Accidents	Drivers Involved in Fatal Acc.	Acc. Rate**†	Fatal Acc. Rate**†	Persons Killed***
15 & younger	48,098	938	8	195.0	1.7	34
16	50,036	3,694	19	738.3	3.8	13
17	37,957	4,541	24	1,196.4	6.3	23
18	40,715	4,975	30	1,221.9	7.4	20
19	44,304	4,585	42	1,034.9	9.5	34
20	46,266	4,235	28	915.4	6.1	21
21	48,784	3,767	14	772.2	2.9	14
22	50,621	3,618	23	714.7	4.5	17
23	46,092	3,373	29	731.8	6.3	23
24	46,754	3,083	25	659.4	5.3	21
25-34	448,902	23,355	163	520.3	3.6	104
35-44	322,566	12,789	67	396.5	2.1	32
45-54	247,989	8,414	58	339.3	2.3	36
55-64	245,892	7,291	52	296.5	2.1	31
65-74	165,338	4,746	35	287.0	2.1	38
75 & older	108,668	2,737	37	251.9	3.4	49
Total (age known)	1,998,982	96,142	654			510
Age unknown		5,260	10			
GRAND TOTAL	1,998,982	101,402	664	507.3	3.3	510

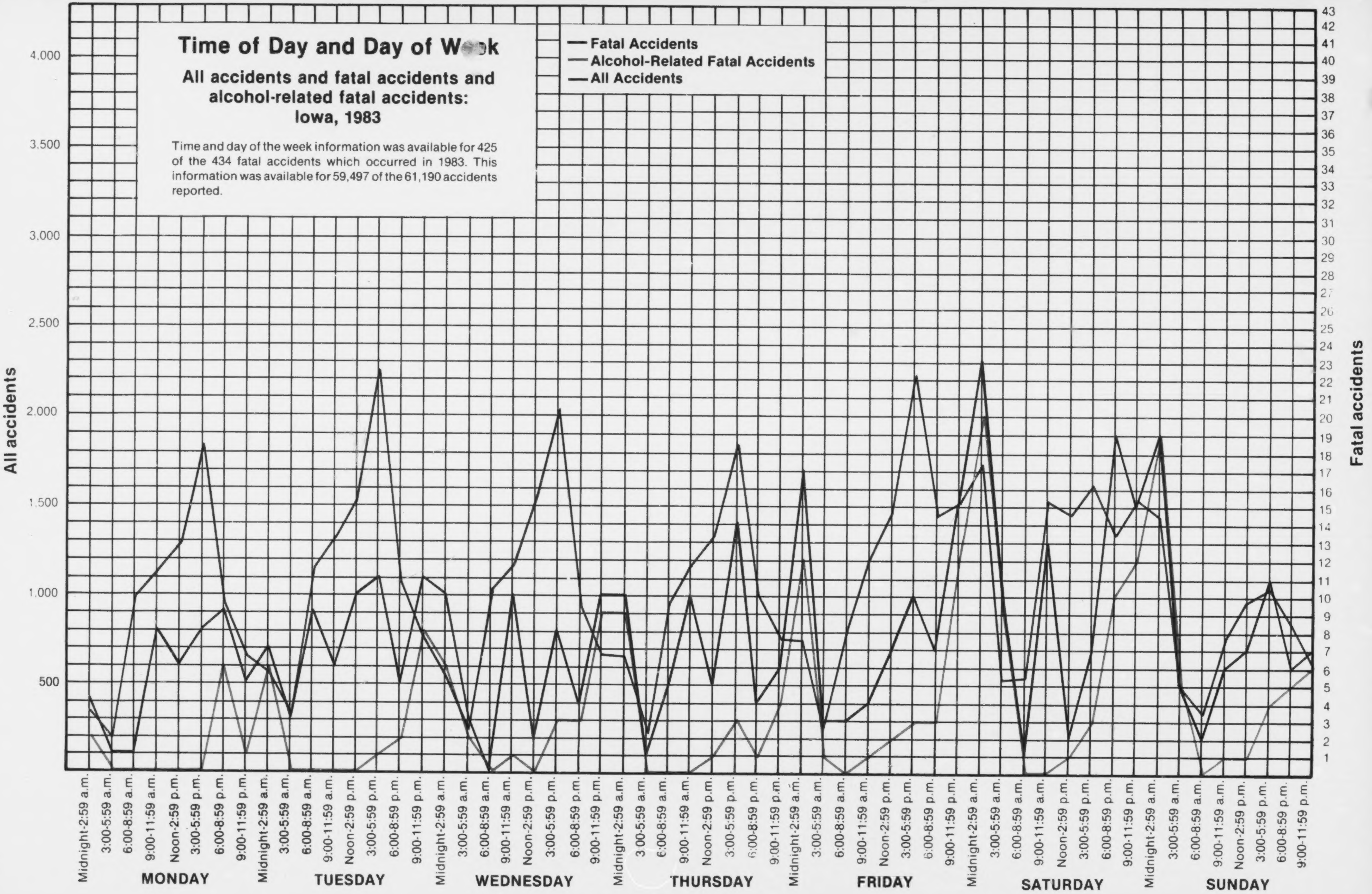
Sex	Licensed Drivers*	Drivers Involved in Accidents	Drivers Involved in Fatal Acc.	Acc. Rate**†	Fatal Acc. Rate**†	Persons Killed
Male	992,493	65,938	545	664.4	5.5	357
Female	1,006,489	32,306	110	321.0	1.1	153
Total (sex known)	1,998,982	98,244	655			510
Sex unknown		3,158	9			
GRAND TOTAL	1,998,982	101,402	664	507.3	3.3	510

* Includes instruction permits and school permits (permits to drive to and from school)

** Accidents/fatal accidents per 10,000 licensed drivers

*** Of persons killed, 5 were age 4 or under, 6 were age 5-9, and 18 were age 10-14.

† Accident rates can be converted to percentage figures by moving the decimal two spaces to the left. For example -- for age 17 the accident rate is 1,196.4 per 10,000 licensed drivers. As a percentage (per 100 licensed drivers), the accident rate is 11.96. This means 12 percent of all 17-year-olds licensed in Iowa were involved in accidents during 1983.



Time of Day and Day of Week

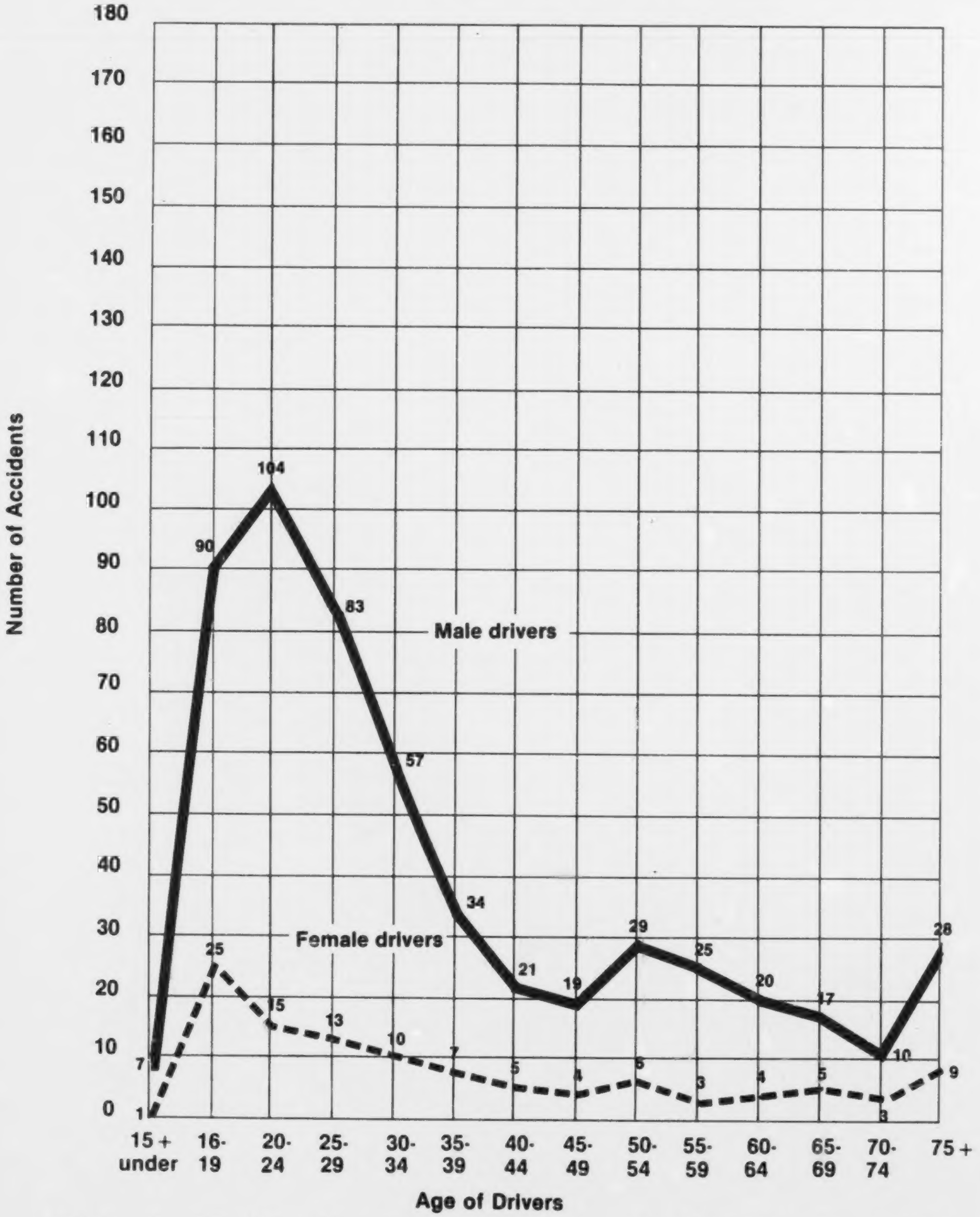
All accidents and fatal accidents and alcohol-related fatal accidents: Iowa, 1983

Time and day of the week information was available for 425 of the 434 fatal accidents which occurred in 1983. This information was available for 59,497 of the 61,190 accidents reported.

SUMMARY

Driver:
Age/Sex

Drivers:	1983 Fatal Accidents	
━━ Male	545	82.1%
- - - Female	110	16.6%
Sex unknown	9	1.4%
Total	664	100.1%



Total: 8 115 119 96 67 41 26 23 35 28 24 22 13 37 = 654

SUMMARY
Drinking/Driving

During 1983, 46.7 percent of the fatal accidents and 48.5 percent of the fatalities were alcohol-related. Alcohol involvement is more apt to occur, and more likely to be reported, in fatal accidents than in non-fatal accidents.

In Iowa during 1983 drivers involved in fatal accidents were not required by law to submit to an alcohol test. Testing for alcohol in both fatal and all accidents was based on ""probable cause," as determined by the investigating officer. Care should be used in comparing the yearly percentages of alcohol-related fatal accidents due to fluctuations in the number of reports received.

Iowa alcohol-related accident figures should not be compared to states where an alcohol test is mandatory.

Age of Drinking Drivers Involved in Accidents

Driver Age	All Accidents		Fatal Accidents		Injury Accidents		Property Damage Accidents	
	No.	%	No.	%	No.	%	No.	%
15 & younger	18	0.4	0	--	14	0.7	4	0.2
16	81	1.8	5	2.4	45	2.1	31	1.5
17	156	3.5	8	3.8	74	3.4	74	3.5
18	292	6.5	18	8.5	137	6.4	137	6.4
19	363	8.1	23	10.9	163	7.6	177	8.3
20	327	7.3	12	5.7	171	8.0	144	6.8
21	284	6.3	10	4.7	131	6.1	143	6.7
22	268	6.0	9	4.3	134	6.2	125	5.9
23	260	5.8	13	6.2	118	5.5	129	6.1
24	205	4.6	9	4.3	105	4.9	91	4.3
25-34	1,254	28.0	66	31.3	612	28.5	576	27.1
35-44	469	10.5	10	4.7	232	10.8	227	10.7
45-54	232	5.2	9	4.3	107	5.0	116	5.5
55-64	150	3.3	9	4.3	65	3.0	76	3.6
65-74	65	1.4	5	2.4	22	1.0	38	1.8
75 & older	16	0.4	2	0.9	6	0.3	8	0.4
Not stated	44	1.0	3	1.4	11	0.5	30	1.4
Total no. of drivers	4,484		211		2,147		2,126	

Holiday Traffic Fatalities
Iowa, 1962-83

In 1983, for the holidays described in the table below, the average number of deaths per day was 2.2. The average number of deaths per day for weekends in 1983 was 1.6.

Note: Holiday periods include the number of full days shown in parentheses. Fatalities occurring from 6 p.m. to midnight on the previous day are also included. Regular weekend periods are from 6 p.m. Friday to midnight Sunday.

Beginning with 1981, the number of days included in a holiday periods have been standardized as follows:

- 1 day if holiday falls on Wednesday
- 3 days if holiday falls on Friday through Monday
- 4 days if holiday falls on Tuesday or Thursday

Year	New Year's Day	Memorial Day	Fourth of July	Labor Day	Thanksgiving Day	Christmas Day
1962	3 (4)	2 (2)	-- (1)	5 (3)	No Record	11 (4)
1963	4 (1)	6 (4)	18 (4)	8 (3)	No Record	7 (1)
1964	3 (3)	4 (3)	7 (3)	15 (3)	No Record	13 (3)
1965	7 (3)	6 (3)	9 (3)	11 (3)	No Record	13 (3)
1966	6 (3)	11 (3)	7 (3)	27 (3)	No Record	6 (3)
1967	4 (3)	7 (4)	13 (4)	9 (3)	No Record	8 (3)
1968	1 (1)	11 (4)	16 (4)	18 (3)	10 (4)	5 (1)
1969	12 (4)	7 (3)	10 (3)	11 (3)	13 (4)	7 (4)
1970	8 (3)	8 (3)	10 (3)	13 (3)	12 (4)	7 (3)
1971	4 (3)	5 (3)	12 (3)	15 (3)	12 (4)	9 (3)
1972	5 (3)	9 (3)	3 (1)	6 (3)	14 (4)	12 (3)
1973	6 (4)	7 (3)	5 (1)	11 (3)	14 (4)	9 (4)
1974	6 (1)	4 (3)	8 (4)	16 (3)	13 (4)	4 (1)
1975	5 (4)	6 (3)	7 (3)	8 (3)	3 (4)	5 (4)
1976	9 (3)	6 (3)	16 (3)	10 (3)	9 (4)	5 (3)
1977	1 (3)	11 (3)	16 (3)	6 (3)	7 (4)	5 (3)
1978[1],[2]	1/0 (3)	13/6 (3)	8/5 (4)	5/1 (3)	12/5 (4)	3/2 (4)
1979	3/3 (3)	9/5 (3)	8/4 (1)	11/8 (3)	10/6 (4)	11/6 (4)
1980	13/7 (4)	5/2 (3)	9/7 (3)	11/6 (3)	13/9 (4)	1/1 (4)
1981	8/4 (4)	8/3 (3)	6/2 (3)	7/4 (3)	7/2 (4)	6/1 (3)
1982	4/3 (3)	3/2 (3)	5/3 (3)	9/6 (3)	8/3 (4)	10/2 (3)
1983	17/11 (3)	10/9 (3)	9/8 (3)	6/2 (3)	3/1 (4)	2/0 (3)

[1] Beginning with 1978, the number of alchol-related traffic fatalities for a given holiday is included, in addition to the total number of holiday fatalities. The number of all fatalities is on the left of the slash mark; the number of alcohol-related fatalities is on the right. As for previous years, the number of days included in the holiday is in parentheses.

[2] In some cases, holiday fatality figures for 1978 through 1982 have been revised.

Iowa Accidents Involving

Fatalities

In 1983 there were:
510 persons killed in 434 fatal accidents

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	33	5.0
Improper passing	10	1.5
Left of center, not passing	72	10.8
Failure to yield	54	8.1
Wrong way, one-way road	2	0.3
Speed too fast	74	11.1
Drag racing	1	0.2
Improper turn	6	0.9
Improper lane change	2	0.3
Following too close	4	0.6
Improper or no signal	0	--
Disregarded R.R. signal	1	0.2
Disregarded warning signal	4	0.6
Reckless driving	7	1.1
Improper backing	1	0.2
Illegal or improper parking	4	0.6
Failure to have control	140	21.1
Lights not on	2	0.3
Inattentive/distracted	21	3.2
Confused/inexperienced	10	1.5
Vision obscured	10	1.5
Oversized vehicle	0	--
Other	43	6.5

Note From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	346	60.6
Drinking - impaired	159	27.8
Drinking - not impaired	50	8.8
Drugs	0	--
Physical defect	0	--
Fatigued	1	0.2
Apparently asleep	5	0.9
Ill	0	--
Under medication	0	--
Infirmities of age	6	1.1
Other	4	0.7
Total no. of drivers (condition stated)	571	
Condition not stated	94	
GRAND TOTAL	665	

Driver Sex	Number of Drivers	Percent
Male	545	83.2
Female	110	16.8
Total no. of drivers (sex known)	655	
Sex not stated	10	
GRAND TOTAL	665	

Driver Age	Number of Drivers	Percent
15 & younger	8	1.2
16	19	2.9
17	24	3.7
18	30	4.6
19	42	6.4
20	28	4.3
21	14	2.1
22	23	3.5
23	29	4.4
24	25	3.8
25-34	163	24.9
35-44	67	10.2
45-54	58	8.9
55-64	52	8.0
65-74	35	5.4
75 & older	37	5.7
Total no. of drivers (age known)	654	
Age not stated	10	
GRAND TOTAL	664	

Note: In 1983 fatal accidents, 79.4 percent of the vehicle occupants who were killed or injured were not wearing seat belts, 3.0 percent were wearing seat belts, and seat belt use was unknown or unreported for 17.5 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	540	81.2
Turning left	42	6.3
Turning right	9	1.4
Backing	2	0.3
Stopped in traffic	11	1.7
Parked	7	1.1
Making U-turn	1	8.1
Passing	19	
Changing lanes	5	
Merging	0	
Parking	0	
Slowing-stopping	6	
Unattended moving vehicle	2	
Other	21	
Total no. of vehicles (action stated)	665	
Action not stated	8	
GRAND TOTAL	673	

Note Total number of vehicles includes parked vehicles involved in accidents.

Vehicle Defect	Number of Vehicles	Percent
None	403	93.3
Brakes	4	6.7
Lights	1	
Steering	2	
Wipers	0	
Tires	16	
Trailer hitch	1	
Other	5	
Total no. of vehicles (defect stated)	432	
No defect stated	241	
GRAND TOTAL	673	

The Environment

Light	Number of Accidents	Percent
Dawn	3	0.7
Daylight	192	44.4
Dusk	18	4.2
Darkness (road lighted)	61	14.1
Darkness (road unlighted)	158	36.6
Total no. of accidents (light stated)	432	
Light not stated	2	
GRAND TOTAL	434	

Note: Figures indicate number of accidents involving fatalities occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	252	58.1
Cloudy	131	30.2
Fog	13	3.0
Mist	12	2.8
Rain	27	6.2
Sleet/hail	2	0.5
Snow	32	7.4
Strong wind	13	3.0
Other	3	0.7

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	14	6.4
Underpass/bridge support	1	0.5
Building	0	--
Culvert	12	5.5
Curb	5	2.3
Ditch	80	36.5
Island/raised median	2	0.9
Embankment/retaining wall	12	5.5
Fence	15	6.8
Guardrail	8	3.7
Light pole	11	5.0
Sign post	17	7.8
Tree or shrubbery	11	5.0
Utility pole	11	5.0
Other pole or support	6	2.7
Mailbox	3	1.4
Impact attenuator	0	--
Other	11	5.0

32.4% of vehicles involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

Traffic Controls	Number of Accidents	Percent
No controls	284	65.4
Traffic signals	11	2.5
Stop sign	54	12.4
Yield sign	0	19.6
No passing zone (marked)	27	
R.R. warning sign	5	
R.R. automatic signal	1	
R.R. crossing gate	0	
Other	52	
Total no. of accidents (control stated)	434	
Control not stated	0	
GRAND TOTAL	434	

Iowa Accidents Involving Alcohol

In 1983 there were:

247 persons killed in alcohol-related accidents, or 48.5 percent of all traffic fatalities
3,418 persons injured in alcohol-related accidents
4,419 accidents involving alcohol and motor vehicles
202 fatal accidents involving alcohol and motor vehicles, or 46.7 percent of all fatal accidents
2,147 personal injury accidents involving alcohol and motor vehicles
2,070 property damage accidents involving alcohol and motor vehicles

The Drinking Driver

Driver Action/ Contributing Circumstances	Number of Drivers/ Operators	Percent
Drinking driver/operator actions:		
Ran traffic control	222	5.0
Improper passing	63	1.4
Left of center, not passing	249	5.6
Failure to yield	249	5.6
Wrong way, one-way road	18	0.4
Speed too fast	667	14.9
Drag racing	6	0.1
Improper turn	65	1.4
Improper lane change	38	0.8
Following too close	78	1.7
Improper or no signal	5	0.1
Disregarded R.R. signal	6	0.1
Disregarded warning signal	13	0.3
Reckless driving	180	4.0
Improper backing	54	1.2
Illegal or improper parking	14	0.3
Failure to have control	2,078	46.3
Lights not on	17	0.4
Inattentive/distracted	255	5.7
Confused/inexperienced	116	2.6
Vision Obscured	127	2.8
Oversized vehicle	0	--
Other	520	11.6
Drinking pedestrian actions:	**Pedestrians**	**Percent**
Crossing against signal	6	7.6
Crossing, not at crosswalk	16	20.3
Walking, improper position on roadway	18	22.8
Walking with traffic	2	2.5
Walking against traffic	2	2.5
Crossing with signal or in crosswalk	7	8.9
Ran onto roadway or into road from between parked cars	11	13.9
Pushing, working on vehicle	0	--
Lying or sitting on roadway	2	2.5
Getting on or off vehicle	5	6.3
Walking, off roadway	2	2.5
Unknown/other	8	10.1

Note: From 0-2 action/circumstances are listed for each drinking driver, operator or pedestrian involved in an accident.

Condition	Number of Drivers/ Operators	(%)	Number of Pedestrians	(%)
Drinking - impaired	2,599	58.1	55	69.6
Drinking - not impaired	1,855	41.5	24	30.4
Drugs	0	--	0	--
Physical defect	2	--	0	--
Fatigued	1	--	0	--
Apparently asleep	11	0.2	0	--
Ill	1	--	0	--
Under medication	1	--	0	--
Infirmities of age	3	0.1	0	--
Other	0	--	0	--
Total no. of drivers (condition stated)	4,473		79	
Condition not stated	11		0	
GRAND TOTAL	4,484		79	

Note: Some of the drinking drivers were not listed as 'condition = drinking,' but did have a blood alcohol content greater than 0. This may occur because the report form provides space to list only one condition, although more than one condition may have been applicable to the driver at the time. If the driver fell asleep at the wheel and possessed a BAC above 0, for instance, the officer may have listed the condition as 'apparently asleep.'

Sex	Number of Drivers/ Operators	(%)	Number of Pedestrians	(%)
Male	3,800	85.4	56	70.9
Female	649	14.6	23	29.1
Total no. of drivers (sex known)	4,449		79	
Sex not stated	35		0	
GRAND TOTAL	4,484		79	

Age	Number of Drivers/ Operators	(%)	Number of Pedestrians	(%)
15 & younger	18	0.4	3	3.8
16	81	1.8	0	--
17	156	3.5	1	1.3
18	292	6.6	3	3.8
19	363	8.2	11	14.1
20	327	7.4	3	3.8
21	284	6.4	5	6.4
22	268	6.0	6	7.7
23	260	5.9	8	10.3
24	205	4.6	2	2.6
25-34	1,254	28.2	17	21.8
35-44	469	10.6	9	11.5
45-54	232	5.2	3	3.8
55-64	150	3.4	5	6.4
65-74	65	1.5	1	1.3
75 & older	16	0.4	1	1.3
Total no. of drivers (age known)	4,440		78	
Age not stated	44		1	
GRAND TOTAL	4,484		79	

Note: In 1983 alcohol-related accidents, 79.5 percent of the motor vehicle occupants who were killed or injured were not wearing seat belts, 2.5 percent were wearing seat belts, and seat belt use was unknown or unreported for 17.9 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	3,352	75.2
Turning left	406	9.1
Turning right	227	5.1
Backing	73	1.6
Stopped in traffic	33	0.7
Parked	12	0.3
Making U-turn	15	0.3
Passing	76	1.7
Changing lanes	31	0.7
Merging	18	0.4
Parking	6	0.1
Slowing-stopping	46	1.0
Unattended moving vehicle	3	0.1
Other	162	3.6
Total no. of vehicles (action stated)	4,460	
Action not stated	24	
GRAND TOTAL	4,484	

Note: Total number of vehicles includes vehicles parked with drinking drivers present.

Vehicle Defect	Number of Vehicles	Percent
None	3,269	94.8
Brakes	40	1.2
Lights	17	0.5
Steering	17	0.5
Wipers	4	0.1
Tires	69	2.0
Trailer hitch	0	--
Other	33	1.0
Total no. of vehicles (defect stated)	3,449	
Defect not stated	1,035	
GRAND TOTAL	4,484	

The Environment

Light	Number of Accidents	Percent
Dawn	28	0.6
Daylight	782	17.7
Dusk	132	3.0
Darkness road lighted)	2,091	47.4
Darkness (road unlighted)	1,379	31.3
Total no. of accidents (light stated)	4,412	
Light not stated	7	
GRAND TOTAL	4,419	

Note: Figures indicate number of accidents involving alcohol occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	2,446	55.4
Cloudy	1,382	31.3
Fog	60	1.4
Mist	191	4.3
Rain	331	7.5
Sleet/hail	26	0.6
Snow	239	5.4
Strong wind	79	1.8
Other	12	0.3

Note: Some accident reports listed more than one type of weather condition. The percentages listed for each weather condition is based on the total number of accidents

Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	93	4.7
Underpass/bridge support	4	0.2
Building	77	3.9
Culvert	54	2.7
Curb	65	3.3
Ditch	443	22.5
Island/raised median	24	1.2
Embankment/retaining wall	62	3.1
Fence	116	5.9
Guardrail	83	4.2
Light pole	184	9.3
Sign post	124	6.3
Tree or shrubbery	152	7.7
Utility pole	249	12.6
Other pole or support	51	2.6
Mailbox	37	1.9
Impact attenuator	0	--
Other	154	7.8

44.0% of drinking drivers involved in accidents struck fixed objects.

Note: Impact attenuators are crash cushioning devices.

Traffic Controls	Number of Accidents	Percents
No controls	3,157	72.5
Traffic signals	428	9.8
Stop sign	379	8.7
Yield sign	30	9.0
No passing zone (marked)	70	
R.R. warning sign	14	
R.R. automatic signal	10	
R.R. crossing gate	0	
Other	267	
Total no. of accidents (control stated)	4,355	
Control not stated	2	
GRAND TOTAL	4,357	

Note: The 4,357 figure does not include 62 accidents in which only the pedestrian was drinking

SUMMARY

Pedestrians

Alcohol-Related Pedestrian Accidents:

	Fatal Acc.		Injury Acc.	
	No.	%	No.	%
Pedestrian (only) drinking	3	8.8	59	8.0
Driver (only) drinking	6	17.6	25	3.4
Pedestrian and driver drinking	2	5.9	11	1.5
No alcohol involvement	18	52.9	633	85.5
Unknown	5	14.7	12	1.6
Total	34		740	

Fatalities:

Age	Killed	%	Injured	%
0-4	1	2.8	69	9.0
5-9	1	2.8	170	22.2
10-14	2	5.6	98	12.8
15-19	6	16.7	95	12.4
20-24	6	16.7	73	9.5
25-44	9	25.0	118	15.4
45-64	3	8.3	51	6.7
65+	8	22.2	58	7.6
Not stated	0	--	34	4.4
Total	36		766	

Of all pedestrian fatalities, 27.8% were persons under 10 or over 64 years of age.

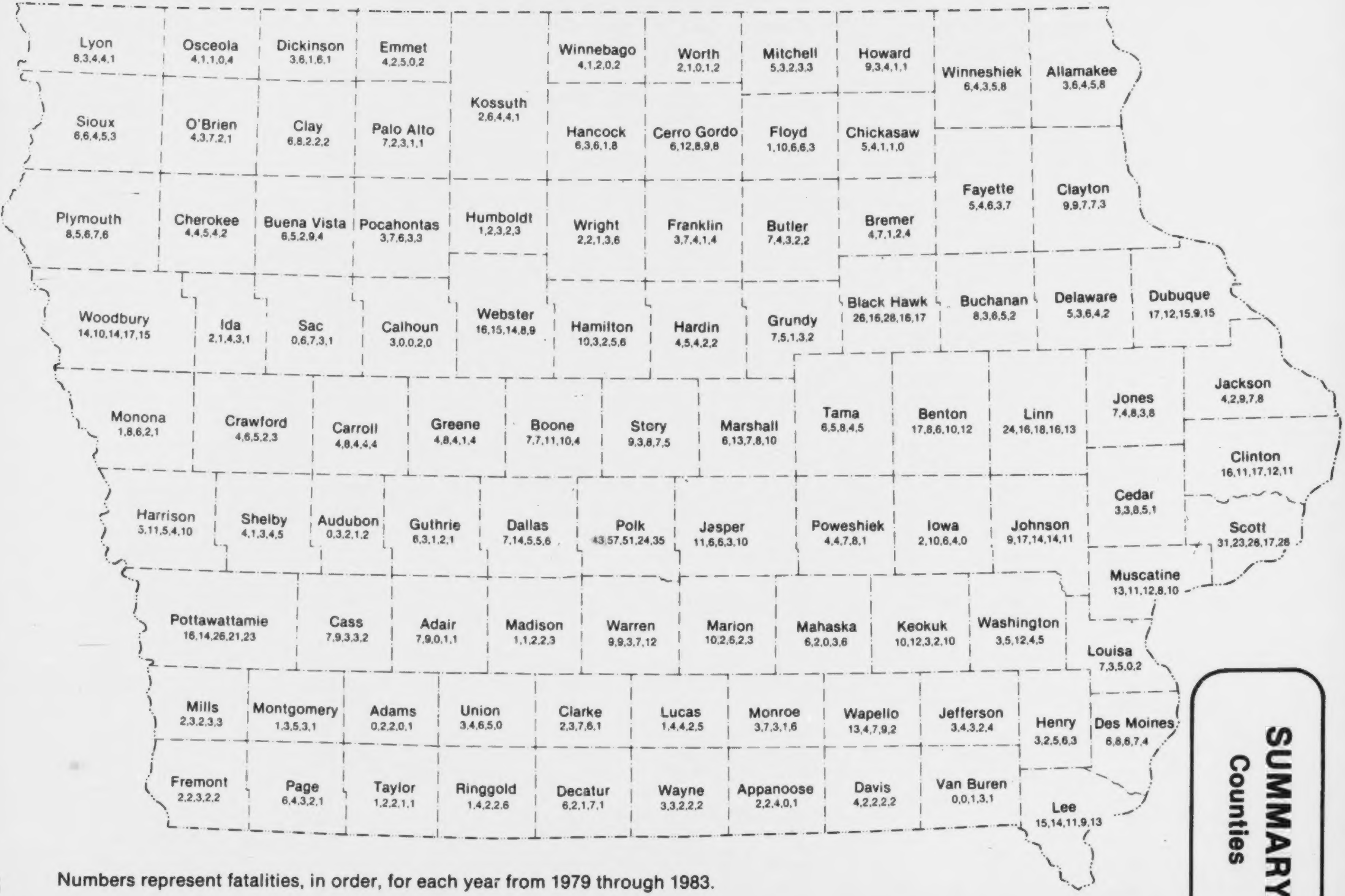
All Pedestrian Accidents:

Pedestrian Action	Killed	Injured
Crossing against signal	1	37
Crossing, not at crosswalk	7	138
Walking, improper position on roadway	5	48
Soliciting rides on road	1	3
Walking with traffic	2	24
Walking against traffic	0	15
Crossing with signal or in crosswalk	2	75
Ran onto roadway or into road from between parked cars	7	232
Directing traffic	0	5
Playing	2	18
Lying or sitting on roadway	1	8
Pushing, working on vehicle	2	22
Getting on or off vehicle	2	23
Maintenance/construction project	1	5
Walking, off roadway	3	22
Unknown	0	91
Total	36	766

Driver Action/ Contributing Circum.*	Fatal Acc.	Injury Acc.
Ran traffic control	1	6
Improper passing	0	2
Left of center, not passing	0	3
Failure to yield	1	47
Speeding	4	17
Improper turn	0	1
Improper lane change	0	0
Following too close	0	0
Disregarded warning signal	0	0
Reckless driving	0	10
Improper backing	0	2
Failure to control	4	33
Headlights not on	0	5
Driver physical condition	0	0
Driver drinking	0	0
Inattentive/distracted	2	31
Confused/inexperienced	0	14
Vision obscured	4	91
Vehicle defect	0	0
Vehicle overloaded/oversized	0	0
Other	8	28

*0-2 actions/circumstances were listed for each driver.

Fatalities by County
1979-1983



Numbers represent fatalities, in order, for each year from 1979 through 1983.

County	Registrations*	Licensed Drivers	All Acc.	Acc. Rate**	Fatal Acc.	Persons Killed	Injury Acc.	Persons Injured
Adair	9,593	6,245	179	187	1	1	60	102
Adams	5,838	3,952	107	183	1	1	30	55
Allamakee	12,503	9,816	235	188	8	8	49	99
Appanoose	13,251	10,174	266	201	1	1	80	122
Audubon	8,468	5,823	131	155	2	2	47	59
Benton	22,243	15,217	332	149	9	12	131	212
Black Hawk	112,726	92,170	2,762	245	15	17	933	1,326
Boone	24,801	17,132	488	197	3	4	157	235
Bremer	22,178	16,315	400	180	4	4	131	185
Buchanan	19,222	14,055	344	179	2	2	114	176
Buena Vista	20,048	14,465	528	263	4	4	150	217
Butler	17,254	11,595	188	109	2	2	45	68
Calhoun	13,214	9,000	218	165	0	0	60	82
Carroll	21,380	15,451	525	246	4	4	140	200
Cass	17,147	11,896	358	209	2	2	102	152
Cedar	17,887	11,641	281	157	1	1	104	154
Cerro Gordo	43,625	34,663	1,181	271	8	8	333	430
Cherokee	15,936	11,252	341	214	2	2	110	151
Chickasaw	14,052	10,260	251	179	0	0	78	118
Clarke	7,989	5,828	180	225	1	1	55	75
Clay	17,932	13,937	461	257	2	2	144	205
Clayton	18,905	13,477	403	213	3	3	103	152
Clinton	47,351	39,034	1,238	261	9	11	296	413
Crawford	17,728	12,564	466	263	3	3	124	177
Dallas	28,463	20,053	462	162	5	6	140	212
Davis	8,010	5,632	148	185	2	2	35	52
Decatur	7,927	6,156	177	223	1	1	56	80
Delaware	16,709	12.084	304	182	1	2	80	109
Des Moines	40,603	31,910	933	230	4	4	257	360
Dickinson	14,492	11,276	335	231	1	1	98	136
Dubuque	66,951	60,710	2,032	304	13	15	618	859
Emmet	12,492	9,448	273	219	2	2	79	117
Fayette	21,975	16,901	339	154	4	7	114	168
Floyd	17,971	13,104	342	190	3	3	88	128
Franklin	13,196	8,689	281	213	3	4	100	160
Fremont	9,135	6,346	180	197	2	2	43	65

* County and total motor vehicle registration figures exclude trailers, travel trailers and mobile homes. Vehicles registered to non-Iowa residents are included.

** Excludes out-of-state drivers.

*** Per 10,000 registered vehicles.

County	Registrations*	Licensed Drivers	All Acc.	Acc. Rate**	Fatal Acc.	Persons Killed	Injury Acc.	Persons Injured
Greene	12,901	8,462	255	198	3	4	66	89
Grundy	14,150	9,305	161	114	2	2	46	71
Guthrie	11,865	7,983	176	148	1	1	50	69
Hamilton	18,044	12,186	414	229	6	6	133	192
Hancock	12,988	9,134	192	148	6	8	52	82
Hardin	21,234	14,995	353	166	2	2	123	165
Harrison	15,409	11,031	410	266	8	10	117	174
Henry	17,429	12,561	281	161	3	3	83	132
Howard	10,358	7,452	152	147	1	1	39	57
Humboldt	12,549	8,776	210	167	3	3	61	92
Ida	9,286	6,095	145	156	1	1	42	61
Iowa	15,466	10,142	292	189	0	0	93	134
Jackson	18,167	13,719	319	176	5	8	102	158
Jasper	34,055	23,831	670	197	10	10	187	288
Jefferson	14,403	10,823	301	209	3	4	82	120
Johnson	58,387	59,334	1,820	312	9	11	552	801
Jones	18,159	12,573	341	188	5	8	113	176
Keokuk	12,871	8,526	181	141	5	10	57	82
Kossuth	21,587	14,953	342	158	1	1	121	179
Lee	36,399	29,583	867	238	10	13	230	335
Linn	143,765	120,996	2,956	206	10	13	899	1,265
Louisa	11,272	7,230	175	155	2	2	61	89
Lucas	9,725	6,862	159	163	5	5	43	74
Lyon	12,270	8,882	192	156	1	1	39	55
Madison	12,486	8,201	182	146	3	3	56	83
Mahaska	20,776	15,157	462	222	5	6	134	205
Marion	25,951	19,033	536	207	3	3	160	217
Marshall	38,332	29,613	855	223	7	10	292	408
Mills	11,567	8,461	291	252	3	3	70	106
Mitchell	11,624	8,423	176	151	3	3	38	52
Monona	11,437	7,991	242	212	1	1	74	98
Monroe	8,190	5,587	183	223	3	6	72	106
Montgomery	12,702	9,301	315	248	1	1	80	109
Muscatine	37,379	28,087	928	248	8	10	316	464
O'Brien	16,165	11,636	282	174	1	1	64	92
Osceola	8,184	5,654	132	161	4	4	26	39

* County and total motor vehicle registration figures exclude trailers, travel trailers and mobile homes. Vehicles registered to non-Iowa residents are included.

** Per 10,000 registered vehicles.

County	Registrations*	Licensed Drivers	All Acc.	Acc. Rate**	Fatal Acc.	Persons Killed	Injury Acc.	Persons Injured
Page	16,686	12,877	336	201	1	1	75	113
Palo Alto	11,648	8,612	220	189	1	1	75	102
Plymouth	22,179	16,018	524	236	6	6	161	222
Pocahontas	11,291	7,843	131	116	2	3	45	60
Polk	258,672	221,158	10,019	387	32	35	2,936	4,247
Pottawattamie	72,853	61,160	2,393	328	19	23	660	926
Poweshiek	17,883	13,384	338	189	1	1	89	137
Ringgold	6,037	4,136	115	190	2	6	28	46
Sac	13,845	9,632	231	167	1	1	66	100
Scott	129,543	118,807	3,645	281	24	28	1,165	1,602
Shelby	14,398	10,260	228	158	5	5	53	74
Sioux	26,507	19,551	474	179	3	3	123	181
Story	50,875	48,701	1,354	266	5	5	385	529
Tama	18,811	12,652	268	142	4	5	75	100
Taylor	8,154	5,714	135	166	1	1	27	52
Union	12,798	9,455	296	231	0	0	85	122
Van Buren	7,869	5,419	98	125	1	1	33	46
Wapello	33,969	26,925	731	215	2	2	231	331
Warren	31,186	23,016	582	187	11	12	194	274
Washington	19,079	13,350	342	179	4	5	99	145
Wayne	7,710	5,392	94	122	2	2	25	31
Webster	39,524	30,986	1,205	305	7	9	328	484
Winnebago	12,739	9,457	162	127	2	2	41	70
Winneshiek	18,363	13,566	469	255	7	8	126	194
Woodbury	78,376	72,492	2,815	359	13	15	767	1,116
Worth	8,808	6,055	125	142	2	2	41	60
Wright	15,737	11,515	243	154	4	6	59	96
Total	**2,542,267**	**1,998,982**	**61,190**	**241**	**434**	**510**	**18,049**	**26,050**

* County and total motor vehicle registration figures exclude trailers, travel trailers and mobile homes. Vehicles registered to non-Iowa residents are included.

** Per 10,000 registered vehicles.

SUMMARY

Counties: Acc. by Road System

	Interstate/ Freeway			U.S. or State Highway			County Road			City Street			Other/Unknown		
	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.
Adair	0	20	44	1	18	22	0	15	23	0	7	28	0	0	1
Adams	0	0	0	1	12	24	0	14	30	0	4	20	0	0	2
Allamakee	0	0	0	4	16	71	3	26	62	1	6	44	0	1	1
Appanoose	0	0	0	0	24	64	0	29	54	0	26	65	1	1	2
Audubon	0	0	0	1	12	35	1	26	27	0	9	20	0	0	0
Benton	0	0	0	1	49	69	8	54	53	0	27	70	0	1	0
Black Hawk	0	0	0	8	374	708	3	51	70	4	502	1,023	0	6	13
Boone	0	0	0	2	32	75	1	33	82	0	90	162	0	2	9
Bremer	0	0	0	2	61	139	1	43	45	1	26	78	0	1	3
Buchanan	0	0	0	0	49	103	2	46	52	0	19	71	0	0	2
Buena Vista	0	0	0	2	70	156	2	28	42	0	51	174	0	1	2
Butler	0	0	0	1	17	55	1	21	44	0	7	40	0	0	2
Calhoun	0	0	0	0	27	49	0	23	49	0	10	55	0	0	5
Carroll	0	0	0	3	61	155	1	36	55	0	42	165	0	1	6
Cass	0	20	53	2	40	86	0	18	40	0	23	72	0	1	3
Cedar	0	33	40	0	17	46	1	42	50	0	11	36	0	1	4
Cerro Gordo	0	10	35	3	154	369	4	39	63	1	126	356	0	4	17
Cherokee	0	0	0	1	49	97	1	26	41	0	35	86	0	0	5
Chickasaw	0	0	0	0	40	73	0	30	55	0	8	45	0	0	0
Clarke	0	10	19	1	27	50	0	7	24	0	11	30	0	0	1
Clay	0	0	0	1	54	106	1	28	51	0	61	158	0	1	0
Clayton	0	0	0	1	41	122	2	47	102	0	15	71	0	0	2
Clinton	0	0	0	6	114	347	2	47	82	1	134	485	0	1	19
Crawford	0	0	0	1	56	152	2	32	71	0	32	112	0	4	4
Dallas	0	26	48	3	34	88	2	36	66	0	44	109	0	0	6
Davis	0	0	0	1	12	45	1	14	38	0	9	28	0	0	0
Decatur	0	10	25	1	23	47	0	15	29	0	7	18	0	1	1
Delaware	0	0	0	1	26	64	0	41	84	0	13	72	0	0	3
Des Moines	0	0	0	0	70	190	2	37	67	2	144	396	0	6	19
Dickinson	0	0	0	1	54	114	0	14	46	0	28	72	0	2	4
Dubuque	0	0	0	7	238	532	5	78	117	1	297	739	0	5	13
Emmet	0	0	0	1	32	79	1	16	35	0	31	78	0	0	0
Fayette	0	0	0	1	52	100	2	38	58	1	22	59	0	2	4
Floyd	0	0	0	1	35	93	1	23	41	1	30	116	0	0	1
Franklin	1	16	29	1	40	64	1	30	37	0	13	48	0	1	0
Fremont	0	8	21	1	11	42	1	18	39	0	6	33	0	0	0
Greene	0	0	0	2	19	59	0	23	52	1	24	75	0	0	0
Grundy	0	0	0	0	10	52	2	29	30	0	7	31	0	0	0
Guthrie	0	0	0	1	23	62	0	25	32	0	2	31	0	0	0
Hamilton	2	17	31	2	30	54	2	33	41	0	53	141	0	0	8
Hancock	0	0	0	4	20	48	2	18	29	0	14	56	0	0	1
Hardin	0	0	0	1	54	77	1	32	61	0	37	87	0	0	3
Harrison	1	13	35	5	44	109	2	46	63	0	13	76	0	1	2
Henry	0	0	0	3	35	82	0	29	52	0	18	60	0	1	1
Howard	0	0	0	0	9	34	1	17	35	0	13	40	0	0	3

SUMMARY

Counties: Acc. by Road System

	Interstate/ Freeway			U.S. or State Highway			County Road			City Street			Other/Unknown		
	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.
Humboldt	0	0	0	0	27	54	3	20	27	0	14	62	0	0	3
Ida	0	0	0	1	15	51	0	18	19	0	9	32	0	0	0
Iowa	0	13	30	0	28	66	0	44	48	0	8	55	0	0	0
Jackson	0	0	0	5	48	88	0	28	39	0	26	83	0	0	2
Jasper	3	30	71	1	61	143	4	37	63	2	59	187	0	0	9
Jefferson	0	0	0	1	27	98	2	26	28	0	27	88	0	2	2
Johnson	3	56	107	5	204	400	1	93	103	0	197	639	0	2	10
Jones	0	0	0	3	41	82	2	51	64	0	18	76	0	3	1
Keokuk	0	0	0	5	26	68	0	21	28	0	10	22	0	0	1
Kossuth	0	0	0	0	47	77	1	42	48	0	31	92	0	1	3
Lee	0	0	0	9	118	282	0	35	72	1	74	264	0	3	9
Linn	0	41	67	4	287	619	5	80	108	1	486	1,235	0	5	18
Louisa	0	0	0	2	23	48	0	30	37	0	8	26	0	0	1
Lucas	0	0	0	5	16	44	0	10	27	0	15	36	0	2	4
Lyon	0	0	0	0	15	53	1	16	47	0	8	51	0	0	1
Madison	0	0	5	1	7	19	2	29	48	0	20	47	0	0	4
Mahaska	0	0	0	3	61	150	2	32	39	0	39	129	0	2	5
Marion	0	0	0	1	66	145	2	32	62	0	60	157	0	2	9
Marshall	0	0	0	2	125	188	5	53	69	0	111	290	0	3	9
Mills	0	16	21	2	30	81	1	14	68	0	10	47	0	0	1
Mitchell	0	0	0	2	12	50	1	14	33	0	11	51	0	1	1
Monona	0	6	15	0	22	52	1	30	31	0	16	62	0	0	7
Monroe	0	0	0	1	27	47	2	25	29	0	19	28	0	1	4
Montgomery	0	0	0	1	31	97	0	21	40	0	28	97	0	0	0
Muscatine	0	0	0	6	159	234	1	35	43	1	117	317	0	5	10
O'Brien	0	0	0	0	32	69	1	14	35	0	18	112	0	0	1
Osceola	0	0	0	1	8	37	1	11	29	2	6	35	0	1	1
Page	0	0	0	0	23	65	1	14	41	0	38	153	0	0	1
Palo Alto	0	0	0	1	29	59	0	21	33	0	23	52	0	2	0
Plymouth	0	0	0	3	61	120	3	58	80	0	40	155	0	2	2
Pocahontas	0	0	0	1	17	29	1	23	17	0	5	36	0	0	2
Polk	7	271	674	9	863	1,701	6	121	181	10	1,656	4,434	0	25	61
Pottawattamie	3	109	242	5	194	458	4	64	97	6	289	909	1	4	8
Poweshiek	1	21	40	0	31	91	0	20	28	0	17	82	0	0	7
Ringgold	0	0	0	1	10	30	1	14	31	0	4	24	0	0	0
Sac	0	0	0	1	19	67	0	31	26	0	15	69	0	1	2
Scott	3	75	147	7	369	775	5	49	74	9	656	1,430	0	16	30
Shelby	0	0	0	5	19	48	0	18	39	0	16	81	0	0	2
Sioux	0	0	0	1	61	122	2	37	62	0	25	159	0	0	5
Story	0	18	42	2	92	249	3	58	73	0	215	596	0	2	4
Tama	0	0	0	4	36	81	0	28	52	0	11	54	0	0	2
Taylor	0	0	0	0	6	32	0	13	38	1	8	37	0	0	0
Union	0	0	0	0	27	55	0	24	28	0	32	124	0	2	4
Van Buren	0	0	0	0	8	27	1	18	23	0	7	14	0	0	0
Wapello	0	0	0	0	95	167	1	36	82	1	95	243	0	5	6

	Interstate/ Freeway			U.S. or State Highway			County Road			City Street			Other/Unknown		
	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.	Fat. Acc.	Inj. Acc.	P.D. Acc.
Warren	4	15	32	4	85	141	3	60	82	0	34	118	0	0	4
Washington	0	0	0	2	43	118	2	31	47	0	21	74	0	4	0
Wayne	0	0	0	0	10	25	2	10	22	0	5	20	0	0	0
Webster	0	0	0	4	110	268	3	55	102	0	159	492	0	4	8
Winnebago	0	0	0	1	13	38	1	18	24	0	10	55	0	0	2
Winneshiek	0	0	0	2	43	110	4	45	113	1	37	112	0	1	1
Woodbury	5	79	164	5	134	300	1	41	56	2	504	1,501	0	9	14
Worth	0	5	18	1	16	23	1	16	21	0	4	19	0	0	1
Wright	0	2	12	1	19	67	2	25	30	1	13	70	0	0	1
Total	**33**	**940**	**2,067**	**200**	**6,281**	**13,816**	**147**	**3,182**	**5,105**	**52**	**7,491**	**21,264**	**2**	**155**	**455**

City	Population*	Number of Accidents 1982	Number of Accidents 1983	Persons Killed 1982	Persons Killed 1983	Persons Injured 1982	Persons Injured 1983	Acc. Rate** 1982	Acc. Rate** 1983
1. Des Moines	191,003	7,072	7,358	9	17	2,738	2,931	370.3	385.2
2. Cedar Rapids	110,243	2,231	2,176	7	2	811	870	202.4	197.4
3. Davenport	103,264	2,657	2,681	10	16	1,127	1,168	257.3	259.6
4. Sioux City	82,003	2,441	2,543	11	11	945	979	297.7	310.1
5. Waterloo	75,985	1,817	1,756	9	6	749	852	239.1	231.1
6. Dubuque	62,321	1,526	1,493	4	2	605	587	244.9	239.6
7. Council Bluffs	56,449	1,721	1,832	7	12	673	663	304.9	324.5
8. Iowa City	50,508	978	997	2	1	320	320	193.6	197.4
9. Ames	45,775	845	901	1	2	240	308	184.6	196.8
10. Cedar Falls	36,322	804	661	2	2	334	276	221.4	182.0
11. Clinton	32,828	884	874	6	2	247	258	269.3	266.2
12. Mason City	30,144	934	801	3	3	308	311	309.8	265.7
13. Burlington	29,529	567	631	2	2	229	239	192.0	213.7
14. Fort Dodge	29,423	1,046	903	2	3	387	348	355.5	306.9
15. Bettendorf	27,381	527	501	1	0	191	214	192.5	183.0
16. Ottumwa	27,381	493	466	4	1	248	177	180.1	170.2
17. Marshalltown	26,938	625	576	3	0	232	235	232.0	213.8
18. Muscatine	23,467	596	663	1	3	241	293	254.0	282.5
19. West Des Moines	21,894	417	488	2	2	154	187	190.5	222.9
20. Marion	19,474	314	295	1	3	138	132	161.2	151.5
21. Urbandale	17,869	334	348	0	0	153	199	186.9	194.8
22. Ankeny	15,429	273	299	0	0	124	176	176.9	193.8
23. Newton	15,292	290	298	1	2	103	100	189.6	194.9
24. Keokuk	13,536	244	268	4	3	90	106	180.3	198.0
25. Fort Madison	13,520	295	309	0	3	82	100	218.2	228.6
26. Boone	12,602	226	244	0	0	98	120	179.3	193.6
27. Spencer	11,726	322	317	1	0	128	133	274.6	270.3
28. Oskaloosa	10,989	218	273	0	0	76	97	198.4	248.4
29. Indianola	10,843	165	197	1	0	56	74	152.2	181.7
30. Carroll	9,705	263	280	0	0	91	87	271.0	288.5
31. Fairfield	9,428	173	200	0	0	50	50	183.5	212.1
32. Grinnell	8,868	127	129	2	0	36	35	143.2	145.5
33. Storm Lake	8,814	240	316	0	0	75	107	272.3	358.5
34. Charles City	8.778	230	175	2	1	62	58	262.0	199.4

* List includes all Iowa cities with a population of 5,000 or more, based on 1980 census figures (including revisions made through January 1983). Figures provided by Office of the State Demographer, Office for Planning and Programming, Des Moines.

** Per 10,000 population

City	Population*	Number of Accidents 1982	Number of Accidents 1983	Persons Killed 1982	Persons Killed 1983	Persons Injured 1982	Persons Injured 1983	Acc. Rate** 1982	Acc. Rate** 1983
35. Webster City	8,572	212	179	1	0	79	71	247.3	208.8
36. Waverly	8,444	148	156	0	2	45	56	175.3	184.7
37. Creston	8,429	229	202	1	0	60	60	271.7	239.6
38. Pella	8,349	127	169	0	0	42	64	152.1	202.4
39. Le Mars	8,276	189	215	1	1	46	67	228.4	259.8
40. Knoxville	8,143	144	144	0	0	46	44	176.8	176.8
41. Decorah	8,068	152	166	0	2	39	56	188.4	205.8
42. Atlantic	7,789	150	156	3	1	57	68	192.6	200.3
43. Coralville	7,687	255	312	3	3	102	160	331.7	405.9
44. Oelwein	7,564	121	95	0	1	44	44	160.0	125.6
45. Estherville	7,518	172	170	0	0	56	67	228.8	226.1
46. Clear Lake	7,458	202	142	0	0	84	66	270.9	190.4
47. Mount Pleasant	7,322	111	127	0	0	44	54	151.6	173.4
48. Perry	7,053	127	125	0	0	52	47	180.1	177.2
49. Cherokee	7,004	141	177	0	0	39	68	201.3	252.7
50. Red Oak	6,810	152	166	0	0	47	60	223.2	243.8
51. Denison	6,675	203	190	0	0	58	59	304.1	284.6
52. Washington	6,584	107	114	0	0	37	32	162.5	173.1
53. Centerville	6,558	156	127	0	0	60	47	237.9	193.7
54. Independence	6,392	117	116	1	0	42	31	183.0	181.5
55. Maquoketa	6,313	104	115	0	2	46	55	164.7	182.2
56. Algona	6,289	135	146	0	0	31	57	214.7	232.2
57. Shenandoah	6,274	104	123	1	0	34	50	165.8	196.0
58. Iowa Falls	6,174	125	120	0	0	48	55	202.5	194.4
59. Clive	6,064	148	169	0	0	75	78	244.1	278.7
60. Nevada	5,912	81	99	0	0	24	34	137.0	167.5
61. Altoona	5,764	56	60	1	0	26	22	97.2	104.1
62. Windsor Heights	5,474	119	150	0	0	40	62	217.4	274.0
63. Clarinda	5,458	73	84	0	0	32	12	133.7	153.9
64. Harlan	5,357	90	114	0	0	18	29	168.0	212.8
65. Glenwood	5,280	68	62	0	0	16	32	128.8	117.4
66. Vinton	5,040	77	52	1	0	31	20	152.8	103.2
67. Sheldon	5,003	109	133	0	0	22	44	217.9	265.8
68. Chariton	5,116	77	55	0	0	16	28	150.5	107.5

* List includes all Iowa cities with a population of 5,000 or more, based on 1980 census figures (including revisions made through January 1983). Figures provided by Office of the State Demographer, Office for Planning and Programming, Des Moines.

** Per 10,000 population.

SUMMARY
Collision Accidents: Vehicle Type

Collision Accidents: Types of Vehicles Involved Iowa, 1983

In 1983, 80.0 percent of all Iowa accidents involved collisions between two or more vehicles. Three or more vehicles were involved in 7.3 percent of all accidents. The following table shows the number of accidents which involved a collision between a given combination of vehicles. (For instance: In 1983, 998 accidents involved a motorcycle/automobile collision.)

Example: If an accident involves two motorcycles and an automobile, it is counted once under motorcycle/automobile and once under motorcycle/motorcycle.

Vehicle Type	Automobile	Automobile/pickup with trailer or camper	Bus	School bus	Bicycle	Moped	Motorcycle	Farm vehicle	Motor home	Recreational vehicle	Train	Panel/van/pickup	Straight truck	Tow/maintenance/ construction vehicle	Truck tractor	Truck tractor with trailer	Other/unknown
Automobile	25,477	409	164	146	441	234	998	172	33	251	97	9,502	899	301	88	1,250	1,794
Automobile/pickup with trailer or camper	409	0	2	3	3	2	17	3	0	6	2	76	13	1	10	29	10
Bus	164	2	0	1	0	1	1	0	0	1	0	34	1	4	1	4	1
School bus	146	3	1	3	1	0	2	2	0	1	0	37	3	0	0	6	1
Bicycle	441	3	0	1	4	19	17	0	0	1	0	84	5	2	0	1	25
Moped	234	2	1	0	19	20	14	0	0	1	0	55	4	1	0	1	4
Motorcycle	998	17	1	2	17	14	75	7	1	4	0	187	18	3	3	13	35
Farm Vehicle	172	3	0	2	0	0	7	0	0	1	1	60	20	2	1	20	3
Motor Home	33	0	0	0	0	0	1	0	2	0	0	15	4	2	0	5	1
Recreational Vehicle	251	6	1	1	1	1	4	1	0	6	0	58	8	3	1	7	11
Train	97	2	0	0	0	0	0	1	0	0	0	24	6	2	0	10	1
Panel/van/pickup	9,502	76	34	37	84	55	187	60	15	58	24	1,261	219	92	30	270	271
Straight Truck	899	13	1	3	5	4	18	20	4	8	6	219	40	8	6	62	12
Tow/maintenance/ construction vehicle	301	1	4	0	2	1	3	2	2	3	2	92	8	4	1	25	5
Truck Tractor	88	10	1	0	0	0	3	1	0	1	0	30	6	1	1	4	0
Truck Tractor with Trailer	1,250	29	4	6	1	1	13	20	5	7	10	270	62	25	4	109	25
Other/unknown	1,794	10	1	1	25	4	35	3	1	11	1	271	12	5	0	25	

Number of Accidents Involving Specific Vehicle Types: 1983

	All Accidents		Fatal Accidents		
Vehicle Type	**No.**	**Percent**	**No.**	**Percent**	**Drivers: % with Iowa Licenses***
Automobile	52,365	85.6	300	69.1	88.6
Automobile/pickup with trailer or camper	745	1.2	3	0.7	88.9
Bus	229	0.4	0	--	--
School bus	220	0.4	3	0.7	100.0
Bicycle	600	1.0	2	0.5	--
Moped	523	0.9	6	1.4	100.0
Motorcycle	2,192	3.6	54	12.4	86.8
Farm vehicle	337	0.6	15	3.5	92.9
Motor home	81	0.1	1	0.2	--
Recreational vehicle	454	0.7	3	0.7	100.0
Train	144	0.2	7	1.6	--
Panel/van/pickup	14,814	24.2	104	24.0	94.0
Straight truck	1,556	2.5	24	5.5	90.0
Tow/maintenance/construction vehicle	482	0.8	8	1.8	100.0
Truck tractor	180	0.3	1	0.2	100.0
Truck tractor with trailer**	2,538	4.1	63	14.5	50.0
Unknown	2,060	3.4	2	0.5	40.0

"All Accident" percentages are based on 61,190 accidents which occurred in 1983. Fatal accident percentages are based on 434 fatal accidents which occurred in 1983.

* 85.7 percent of all drivers involved in fatal accidents in Iowa during 1983 were licensed in Iowa.

** The 45 accidents involving double bottom trucks which occurred in 1983 are included in the "truck tractor with trailer" category. For more information, contact the DOT's Office of Driver Services.

Iowa Accidents Involving
All Vehicles

In 1983 there were:
- **474 motor vehicle occupants killed**
- **25,279 motor vehicle occupants injured**
- **61,190 accidents involving motor vehicles**
  - **434 fatal accidents involving motor vehicles**
  - **18,049 personal injury accidents involving motor vehicles**
  - **42,707 property damage accidents involving motor vehicles**

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	2,334	2.3
Improper passing	758	0.7
Left of center, not passing	1,094	1.1
Failure to yield	8,558	8.4
Wrong way, one-way road	70	0.1
Speed too fast	4,111	4.1
Drag racing	20	--
Improper turn	1,001	1.0
Improper lane change	957	0.9
Following too close	1,488	1.5
Improper or no signal	393	0.4
Disregarded R.R. signal	37	--
Disregarded warning signal	85	0.1
Reckless driving	477	0.5
Improper backing	1,080	1.1
Illegal or improper parking	172	0.2
Failure to have control	9,246	9.1
Lights not on	102	0.1
Inattentive/distracted	3,283	3.2
Confused/inexperienced	1,294	1.3
Vision obscured	5,583	5.5
Oversized vehicle	63	0.1
Other	3,574	3.5

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	92,898	93.9
Drinking - impaired	2,588	2.6
Drinking - not impaired	1,851	1.9
Drugs	25	--
Physical defect	108	0.1
Fatigued	303	0.3
Apparently asleep	444	0.4
Ill	66	0.1
Under medication	65	0.1
Infirmities of age	364	0.4
Other	204	0.2
Total no. of drivers (condition stated)	98,916	
Condition not stated	2,486	
GRAND TOTAL	101,402	

Driver Sex	Number of Drivers	Percent
Male	65,938	67.1
Female	32,306	32.9
Total no. of drivers (sex known)	98,244	
Sex not stated	3,158	
GRAND TOTAL	101,402	

Driver Age	Number of Drivers	Percent
15 & younger	939	1.0
16	3,694	3.8
17	4,541	4.7
18	4,975	5.2
19	4,585	4.8
20-24	18,076	18.8
25-34	23,355	24.3
35-44	12,789	13.3
45-54	8,414	8.8
55-64	7,291	7.6
65-74	4,746	4.9
75 & older	2,737	2.8
Total no. of drivers (age known)	96,142	
Age not stated	5,260	
GRAND TOTAL	101,402	

Note: In 1983 motor vehicle accidents, 69.0 percent of the motor vehicle occupants who were killed or injured were not wearing seat belts, 3.5 percent were wearing seat belts, and seat belt use was unknown or unreported for 27.5 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	67,611	65.3
Turning left	10,596	10.2
Turning right	3,980	3.8
Backing	2,621	2.5
Stopped in traffic	4,415	4.3
Parked	6,527	6.3
Making U-turn	248	7.5
Passing	1,235	
Changing lanes	1,385	
Merging	536	
Parking	195	
Slowing-stopping	2,597	
Unattended moving vehicle	113	
Other	1,432	
Total no. of vehicles (action stated)	103,491	
Action not stated	4,551	
GRAND TOTAL	108,042	

Note: Total number of vehicles includes parked vehicles involved in accidents.

Vehicle Defect	Number of Vehicles	Percent
None	66,357	97.3
Brakes	534	2.7
Lights	156	
Steering	134	
Wipers	27	
Tires	444	
Trailer hitch	51	
Other	500	
Total no. of vehicles (defect stated)	68,203	
Defect not stated	39,839	
GRAND TOTAL	108,042	

The Environment

Light	Number of Accidents	Percent
Dawn	763	1.3
Daylight	38,016	62.9
Dusk	2,210	3.7
Darkness (road lighted)	10,779	17.8
Darkness (road unlighted)	8,680	14.4
Total no. of accidents (light stated)	60,448	
Light not stated	742	
GRAND TOTAL	61,190	

Note: Figures indicate number of accidents involving all vehicles occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	33,269	54.4
Cloudy	17,482	28.6
Fog	813	1.3
Mist	1,895	3.1
Rain	4,176	6.8
Sleet/hail	515	0.8
Snow	4,654	7.6
Strong wind	995	1.6
Other	180	0.3

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for all types of vehicles.

Fixed Object Struck	Vehicles Striking Objects	Percent
Bridge/overpass	713	5.7
Underpass/bridge support	54	0.4
Building	331	2.6
Culvert	288	2.3
Curb	512	4.1
Ditch	3,087	24.5
Island/raised median	148	1.2
Embankment/retaining wall	337	2.7
Fence	825	6.5
Guardrail	682	5.4
Light pole	965	7.7
Sign post	885	7.0
Tree or shrubbery	741	5.9
Utility pole	1,173	9.3
Other pole or support	324	2.6
Mailbox	220	1.7
Impact attenuator	85	0.7
Other	1,233	9.8

11.7% of all vehicles involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

Traffic Controls	Number of Accidents	Percent
No controls	41,491	68.1
Traffic signals	7,842	12.9
Stop sign	8,497	13.9
Yield sign	759	5.1
No passing zone (marked)	518	
R.R. warning sign	96	
R.R. automatic signal	96	
R.R. crossing gate	18	
Other	1,643	
Total no. of accidents (control stated)	60,960	
Control not stated	230	
GRAND TOTAL	61,190	

Iowa Accidents Involving Automobiles

In 1983 there were:
- **300 automobile occupants killed**
- **15,194 automobile occupants injured**
- **52,365 accidents involving automobiles**
  - **300 fatal accidents involving automobiles**
  - **14,485 personal injury accidents involving automobiles**
  - **37,580 property damage accidents involving automobiles**

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	1,806	2.4
Improper passing	498	0.7
Left of center, not passing	762	1.0
Failure to yield	6,714	9.0
Wrong way, one-way road	53	0.1
Speed too fast	2,993	4.0
Drag racing	16	--
Improper turn	727	1.0
Improper lane change	669	0.9
Following too close	1,059	1.4
Improper or no signal	239	0.3
Disregarded R.R. signal	25	--
Disregarded warning signal	48	0.1
Reckless driving	332	0.4
Improper backing	647	0.9
Illegal or improper parking	117	0.2
Failure to have control	6,500	8.7
Lights not on	74	0.1
Inattentive/distracted	2,397	3.2
Confused/inexperienced	927	1.2
Vision obscured	4,115	5.5
Oversized vehicle	16	--
Other	2,372	3.2

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	68,662	94.0
Drinking - impaired	1,844	2.5
Drinking - not impaired	1,338	1.8
Drugs	20	--
Physical defect	73	0.1
Fatigued	204	0.3
Apparently asleep	315	0.4
Ill	50	0.1
Under medication	48	0.1
Infirmities of age	327	0.5
Other	137	0.2
Total no. of drivers (condition stated)	73,018	
Condition not stated	1,579	
GRAND TOTAL	74,597	

Driver Sex	Number of Drivers	Percent
Male	43,841	60.0
Female	29,533	40.0
Total no. of drivers (sex known)	73,374	
Sex not stated	1,223	
GRAND TOTAL	74,597	

Driver Age	Number of Drivers	Percent
15 & younger	430	0.6
16	3,097	4.3
17	3,804	5.3
18	4,065	5.7
19	3,743	5.2
20-24	13,726	19.1
25-34	16,430	22.9
35-44	8,955	12.5
45-54	5,773	8.0
55-64	5,285	7.4
65-74	4,004	5.6
75 & older	2,527	3.5
Total no. of drivers (age known)	71,839	
Age not stated	2,758	
GRAND TOTAL	74,597	

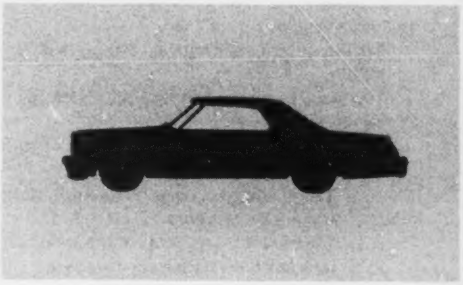
Note: In 1983 automobile accidents, 67.7 percent of the automobile occupants who were killed or injured were not wearing seat belts, 3.7 percent were wearing seat belts, and seat belt use was unknown or unreported for 28.6 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	50,087	65.4
Turning left	8,101	10.6
Turning right	2,784	3.6
Backing	1,619	2.1
Stopped in traffic	3,515	4.6
Parked	5,012	6.5
Making U-turn	163	7.1
Passing	819	
Changing lanes	989	
Merging	410	
Parking	129	
Slowing-stopping	1,927	
Unattended moving vehicle	60	
Other	971	
Total no. of vehicles (action stated)	76,586	
Action not stated	3,083	
GRAND TOTAL	79,669	

Note: Total number of vehicles includes parked automobiles involved in accidents.

Automobiles



Vehicle Defect	Number of Vehicles	Percent
None	47,884	97.8
Brakes	299	
Lights	80	2.2
Steering	83	
Wipers	19	
Tires	275	
Trailer hitch	9	
Other	299	
Total no. of vehicles (defect stated)	48,948	
Defect not stated	30,721	
GRAND TOTAL	79,669	

Fixed Object Struck	Vehicles Striking Objects	Percent
Bridge/overpass	519	5.8
Underpass/bridge support	43	0.5
Building	228	2.6
Culvert	206	2.3
Curb	375	4.2
Ditch	2,018	22.7
Island/raised median	102	1.1
Embankment/retaining wall	245	2.8
Fence	563	6.3
Guardrail	522	5.9
Light pole	668	7.5
Sign post	650	7.3
Tree or shrubbery	563	6.3
Utility pole	893	10.1
Other pole or support	224	2.5
Mailbox	152	1.7
Impact attenuator	59	0.7
Other	855	9.6

11.2% of automobiles involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

The Environment

Light	Number of Accidents	Percent
Dawn	615	1.2
Daylight	33,081	64.0
Dusk	1,908	3.7
Darkness (road lighted)	9,548	18.5
Darkness (road unlighted)	6,544	12.7
Total no. of accidents (light stated)	51,696	
Light not stated	669	
GRAND TOTAL	52,365	

Note: Figures indicate number of accidents involving automobiles occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	28,376	54.2
Cloudy	15,011	28.7
Fog	652	1.2
Mist	1,653	3.2
Rain	3,675	7.0
Sleet/hail	432	0.8
Snow	3,923	7.5
Strong wind	751	1.4
Other	155	0.3

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Traffic Controls	Number of Accidents	Percent
No controls	35,784	68.6
Traffic signals	7,151	13.7
Stop sign	6,892	13.2
Yield sign	612	4.4
No passing zone (marked)	364	
R.R. warning sign	68	
R.R. automatic signal	64	
R.R. crossing gate	15	
Other	1,182	
Total no. of accidents (control stated)	52,132	
Control not stated	233	
GRAND TOTAL	52,365	

Iowa Accidents Involving

Automobiles/Pickups With Trailers Or Campers

In 1983 there were:

- **0 occupants of automobiles/pickups with trailers or campers killed**
- **103 occupants of automobiles/pickups with trailers or campers injured**
- **745 accidents involving automobiles/pickups with trailers or campers**
  - **3 fatal accidents involving automobiles/pickups with trailers or campers**
  - **155 personal injury accidents involving automobiles/-pickups with trailers or campers**
  - **587 property damage accidents involving automobiles/ pickups with trailers or campers**

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	18	2.4
Improper passing	4	0.5
Left of center, not passing	10	1.3
Failure to yield	50	6.7
Wrong way, one-way road	0	--
Speed too fast	32	4.3
Drag racing	0	--
Improper turn	11	1.5
Improper lane change	19	2.6
Following too close	12	1.6
Improper or no signal	10	1.3
Disregarded R.R. signal	0	--
Disregarded warning signal	0	--
Reckless driving	1	0.1
Improper backing	8	1.1
Illegal or improper parking	2	0.3
Failure to have control	60	8.1
Lights not on	0	--
Inattentive/distracted	12	1.6
Confused/inexperienced	8	1.1
Vision obscured	53	7.2
Oversized vehicle	1	0.1
Other	43	5.8

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	695	95.1
Drinking - impaired	18	2.5
Drinking - not impaired	7	1.0
Drugs	0	--
Physical defect	1	0.1
Fatigued	2	0.3
Apparently asleep	1	0.1
Ill	1	0.1
Under medication	2	0.3
Infirmities of age	2	0.3
Other	2	0.3
Total no. of drivers (condition stated)	731	
Condition not stated	10	
GRAND TOTAL	741	

Driver Sex	Number of Drivers	Percent
Male	625	85.1
Female	109	14.9
Total no. of drivers (sex known)	734	
Sex not stated	7	
GRAND TOTAL	741	

Driver Age	Number of Drivers	Percent
15 & younger	5	0.7
16	10	1.4
17	11	1.5
18	22	3.1
19	12	1.7
20-24	103	14.3
25-34	193	26.8
35-44	131	18.2
45-54	101	14.0
55-64	63	8.8
65-74	51	7.1
75 & older	18	2.5
Total no. of drivers (age known)	720	
Age not stated	21	
GRAND TOTAL	741	

Note: In 1983 automobile/pickup with trailer or camper accidents, 70.9 percent of the automobile/pickup with trailer or camper occupants who were killed or injured were not wearing seat belts, 2.9 percent were wearing seat belts, and seat belt use was unknown or unreported for 26.2 percent of those killed or injured.

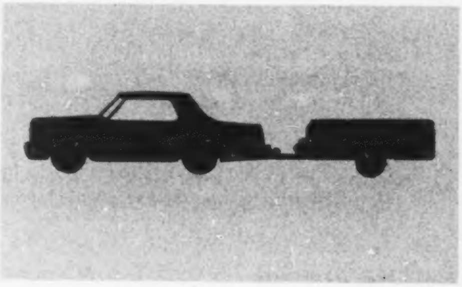
The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	475	63.3
Turning left	79	10.5
Turning right	47	6.3
Backing	27	3.6
Stopped in traffic	23	3.1
Parked	30	4.0
Making U-turn	2	9.2
Passing	9	
Changing lanes	22	
Merging	7	
Parking	0	
Slowing-stopping	21	
Unattended moving vehicle	0	
Other	8	
Total no. of vehicles (action stated)	750	
Action not stated	21	
GRAND TOTAL	771	

Note: Total number of vehicles includes parked automobiles/pickups with trailers or campers.

Automobiles/Pickups With Trailers or Campers

Vehicle Defect	Number of Vehicles	Percent
None	480	91.4
Brakes	5	8.6
Lights	5	
Steering	1	
Wipers	0	
Tires	4	
Trailer hitch	18	
Other	12	
Total no. of vehicles (defect stated)	525	
Defect not stated	246	
GRAND TOTAL	771	



Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	9	10.5
Underpass/bridge support	0	--
Building	2	2.3
Culvert	5	5.8
Curb	2	2.3
Ditch	27	31.4
Island/raised median	0	--
Embankment/retaining wall	4	4.7
Fence	4	4.7
Guardrail	6	7.0
Light pole	6	7.0
Sign post	5	5.8
Tree or shrubbery	1	1.2
Utility pole	9	10.5
Other pole or support	1	1.2
Mailbox	2	2.3
Impact attenuator	0	--
Other	3	3.5

11.2% of automobiles or pickups with trailers or campers involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

The Environment

Light	Number of Accidents	Percent
Dawn	7	1.0
Daylight	566	76.6
Dusk	21	2.8
Darkness (road lighted)	69	9.3
Darkness (road unlighted)	76	10.3
Total no. of accidents (light stated)	739	
Light not stated	6	
GRAND TOTAL	745	

Note: Figures indicate number of accidents involving automobiles/pickups with trailers or campers occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	421	56.5
Cloudy	206	27.7
Fog	11	1.5
Mist	26	3.5
Rain	54	7.2
Sleet/hail	9	1.2
Snow	50	6.7
Strong wind	15	2.0
Other	4	0.5

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Traffic Controls	Number of Accidents	Percent
No controls	568	76.7
Traffic signals	80	10.8
Stop sign	58	7.8
Yield sign	5	4.7
No passing zone (marked)	7	
R.R. warning sign	1	
R.R. automatic signal	1	
R.R. crossing gate	0	
Other	21	
Total no. of accidents (control stated)	741	
Control not stated	4	
GRAND TOTAL	745	

Iowa Accidents Involving Buses

In 1983 there were:

- **0 bus occupants killed**
- **26 bus occupants injured**
- **229 accidents involving buses**
  - **0 fatal accidents involving buses**
  - **55 personal injury accidents involving buses**
  - **174 property damage accidents involving buses**

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	2	0.9
Improper passing	0	--
Left of center, not passing	0	--
Failure to yield	15	6.8
Wrong way, one-way road	0	--
Speed too fast	8	3.6
Drag racing	0	--
Improper turn	4	1.8
Improper lane change	5	2.3
Following too close	3	1.4
Improper or no signal	0	--
Disregarded R.R. signal	0	--
Disregarded warning signal	0	--
Reckless driving	0	--
Improper backing	6	2.7
Illegal or improper parking	1	0.5
Failure to have control	9	4.1
Lights not on	0	--
Inattentive/distracted	8	3.6
Confused/inexperienced	1	0.5
Vision obscured	7	3.2
Oversized vehicle	1	0.5
Other	11	5.0

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	218	99.5
Drinking - impaired	0	--
Drinking - not impaired	1	0.5
Drugs	0	--
Physical defect	0	--
Fatigued	0	--
Apparently asleep	0	--
Ill	0	--
Under medication	0	--
Infirmities of age	0	--
Other	0	--
Total no. of drivers (condition stated)	219	
Condition not stated	2	
GRAND TOTAL	221	

Driver Sex	Number of Drivers	Percent
Male	166	76.5
Female	51	23.5
Total no. of drivers (sex known)	217	
Sex not stated	4	
GRAND TOTAL	221	

Driver Age	Number of Drivers	Percent
15 & younger	0	--
16	0	--
17	0	--
18	1	0.5
19	1	0.5
20-24	15	7.0
25-34	65	30.5
35-44	52	24.4
45-54	39	18.3
55-64	35	16.4
65-74	4	1.9
75 & older	1	0.5
Total no. of drivers (age known)	213	
Age not stated	8	
GRAND TOTAL	221	

Note: In 1983 bus accidents, 73.1 percent of the bus occupants who were killed or injured were not wearing seat belts, 3.8 percent were wearing seat belts, and seat belt use was unknown or unreported for 23.1 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	117	52.9
Turning left	20	9.1
Turning right	19	8.6
Backing	9	4.1
Stopped in traffic	27	12.2
Parked	7	3.2
Making U-turn	0	10.0
Passing	0	
Changing lanes	5	
Merging	1	
Parking	1	
Slowing-stopping	9	
Unattended moving vehicle	1	
Other	5	
Total no. of vehicles (action stated)	221	
Action not stated	8	
GRAND TOTAL	229	

Note: Total number of vehicles includes parked buses involved in accidents.

Vehicle Defect	Number of Vehicles	Percent
None	152	95.6
Brakes	5	4.4
Lights	1	
Steering	1	
Wipers	0	
Tires	0	
Trailer hitch	0	
Other	0	
Total no. of vehicles (defect stated)	159	
Defect not stated	70	
GRAND TOTAL	229	

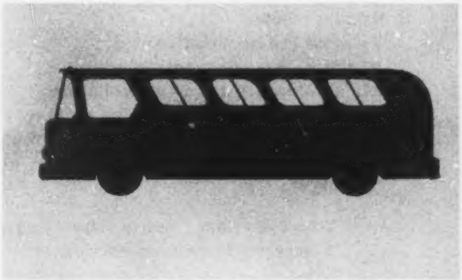
The Environment

Light	Number of Accidents	Percent
Dawn	5	2.2
Daylight	194	84.7
Dusk	5	2.2
Darkness (road lighted)	20	8.7
Darkness (road unlighted)	5	2.2
Total no. of accidents (light stated)	229	
Light not stated		
GRAND TOTAL	229	

Note: Figures indicate number of accidents involving buses occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	117	51.1
Cloudy	68	29.7
Fog	4	1.7
Mist	8	3.5
Rain	16	7.0
Sleet/hail	4	1.7
Snow	26	11.4
Strong wind	5	2.2
Other	2	0.9

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.



Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	0	--
Underpass/bridge support	1	6.3
Building	1	6.3
Culvert	0	--
Curb	0	--
Ditch	3	18.8
Island/raised median	0	--
Embankment/retaining wall	0	--
Fence	0	--
Guardrail	0	--
Light pole	2	12.5
Sign post	0	--
Tree or shrubbery	0	--
Utility pole	3	18.8
Other pole or support	2	12.5
Mailbox	0	--
Impact attenuator	0	--
Other	4	25.0

7.0% of buses involved in accidents struck fixed objects

Note: Impact attenuators are crash-cushioning devices

Traffic Controls	Number of Accidents	Percent
No controls	154	67.3
Traffic signals	40	17.5
Stop sign	28	12.2
Yield sign	3	3.1
No passing zone (marked)	2	
R.R. warning sign	0	
R.R. automatic signal	0	
R.R. crossing gate	1	
Other	1	
Total no. of accidents (control stated)	229	
Control not stated		
GRAND TOTAL	229	

Iowa Accidents Involving

School Buses

In 1983 there were:

- **0 school bus occupants killed**
- **43 school bus occupants injured**
- **220 accidents involving school buses**
  - **3 fatal accidents involving a school bus**
  - **59 personal injury accidents involving school buses**
  - **158 property damage accidents involving school buses**

3 persons were killed in school bus accidents. Of this number, 3 were not school bus occupants.

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	1	0.5
Improper passing	1	0.5
Left of center, not passing	0	--
Failure to yield	22	10.4
Wrong way, one-way road	0	--
Speed too fast	5	2.4
Drag racing	0	--
Improper turn	1	0.5
Improper lane change	0	--
Following too close	1	0.5
Improper or no signal	1	0.5
Disregarded R.R. signal	0	--
Disregarded warning signal	0	--
Reckless driving	0	--
Improper backing	7	3.3
Illegal or improper parking	0	--
Failure to have control	7	3.3
Lights not on	1	0.5
Inattentive/distracted	4	1.9
Confused/inexperienced	3	1.4
Vision obscured	14	6.6
Oversized vehicle	1	0.5
Other	3	1.4

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	210	99.5
Drinking - impaired	0	--
Drinking - not impaired	0	--
Drugs	0	--
Physical defect	0	--
Fatigued	0	--
Apparently asleep	0	--
Ill	1	0.5
Under medication	0	--
Infirmities of age	0	--
Other	0	--
Total no. of drivers (condition stated)	211	
Condition not stated	1	
GRAND TOTAL	212	

Driver Sex	Number of Drivers	Percent
Male	131	62.4
Female	79	37.6
Total no. of drivers (sex known)	210	
Sex not stated	2	
GRAND TOTAL	212	

Driver Age	Number of Drivers	Percent
15 & younger	0	--
16	1	0.5
17	1	0.5
18	0	--
19	2	1.0
20-24	20	9.7
25-34	51	24.6
35-44	34	16.4
45-54	49	23.7
55-64	37	17.9
65-74	11	5.3
75 & older	1	0.5
Total no. of drivers (age known)	207	
Age not stated	5	
GRAND TOTAL	212	

Note: In 1983 school bus accidents, 72.1 percent of the school bus occupants who were killed or injured were not wearing seat belts, 2.3 percent were wearing seat belts, and seat belt use was unknown or unreported for 25.6 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	113	52.3
Turning left	33	15.3
Turning right	12	5.6
Backing	12	5.6
Stopped in traffic	22	10.2
Parked	10	4.6
Making U-turn	1	6.5
Passing	1	
Changing lanes	1	
Merging	0	
Parking	3	
Slowing-stopping	6	
Unattended moving vehicle	1	
Other	1	
Total no. of vehicles (action stated)	216	
Action not stated	7	
GRAND TOTAL	223	

Note: Total number of vehicles includes parked school buses involved in accidents.

School Buses

Vehicle Defect	Number of Vehicles	Percent
None	162	97.0
Brakes	0	3.0
Lights	1	
Steering	0	
Wipers	0	
Tires	2	
Trailer hitch	0	
Other	2	
Total no. of vehicles (defect stated)	167	
Defect not stated	56	
GRAND TOTAL	223	

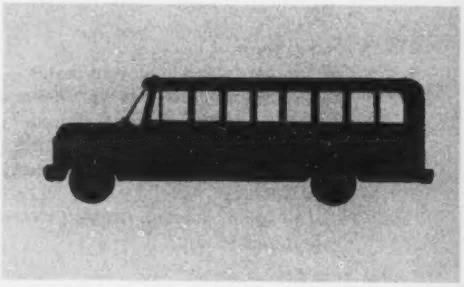
The Environment

Light	Number of Accidents	Percent
Dawn	6	2.8
Daylight	200	91.7
Dusk	4	1.8
Darkness (road lighted)	5	2.3
Darkness (road unlighted)	3	1.4
Total no. of accidents (light stated)	218	
Light not stated	2	
GRAND TOTAL	220	

Note: Figures indicate number of accidents involving school buses occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	86	39.1
Cloudy	81	36.8
Fog	14	6.4
Mist	10	4.5
Rain	18	8.2
Sleet/hail	1	0.5
Snow	23	10.5
Strong wind	1	0.5
Other	0	--

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.



Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	0	--
Underpass/bridge support	0	--
Building	0	--
Culvert	0	--
Curb	1	8.3
Ditch	5	41.7
Island/raised median	0	--
Embankment/retaining wall	1	8.3
Fence	0	--
Guardrail	0	--
Light pole	0	--
Sign post	0	--
Tree or shrubbery	2	16.7
Utility pole	1	8.3
Other pole or support	2	16.7
Mailbox	0	--
Impact attenuator	0	--
Other	0	--

5.4% of school buses involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

Traffic Controls	Number of Accidents	Percent
No controls	158	72.5
Traffic signals	21	9.6
Stop sign	32	14.7
Yield sign	1	3.2
No passing zone (marked)	1	
R.R. warning sign	1	
R.R. automatic signal	1	
R.R. crossing gate	0	
Other	3	
Total no. of accidents (control stated)	218	
Control not stated	2	
GRAND TOTAL	220	

Iowa Accidents Involving Bicycles

In 1983 there were:

- **2 bicycle riders killed in bicycle/motor vehicle accidents**
- **585 bicycle riders injured in bicycle/motor vehicle accidents**
- **599 accidents involving bicycles/motor vehicles**
  - **2 fatal accidents involving bicycles/motor vehicles**
  - **576 personal injury accidents involving bicycles/motor vehicles**
  - **21 property damage accidents involving bicycles/-motor vehicles**

The Driver Of Motor Vehicle Involved

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	6	1.0
Improper passing	8	1.4
Left of center, not passing	2	0.3
Failure to yield	66	11.2
Wrong way, one-way road	0	--
Speed too fast	11	1.9
Drag racing	0	--
Improper turn	4	0.7
Improper lane change	1	0.2
Following too close	4	0.7
Improper or no signal	1	0.2
Disregarded R.R. signal	0	--
Disregarded warning signal	0	--
Reckless driving	5	0.9
Improper backing	2	0.3
Illegal or improper parking	1	0.2
Failure to have control	11	1.9
Lights not on	0	--
Inattentive/distracted	20	3.4
Confused/inexperienced	6	1.0
Vision obscured	78	13.3
Oversized vehicle	0	--
Other	14	2.4

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	550	98.2
Drinking - impaired	3	0.5
Drinking - not impaired	3	0.5
Drugs	0	--
Physical defect	1	0.2
Fatigued	1	0.2
Apparently asleep	1	0.2
Ill	0	--
Under medication	0	--
Infirmities of age	1	0.2
Other	0	--
Total no. of drivers (condition stated)	560	
Condition not stated	26	
GRAND TOTAL	586	

Driver Sex	Number of Drivers	Percent
Male	356	65.1
Female	191	34.9
Total no. of drivers (sex known)	547	
Sex not stated	39	
GRAND TOTAL	586	

Driver Age	Number of Drivers	Percent
15 & younger	16	2.9
16	19	3.5
17	17	3.1
18	25	4.6
19	19	3.5
20-24	85	15.6
25-34	129	23.6
35-44	75	13.7
45-54	51	9.3
55-64	57	10.4
65-74	33	6.0
75 & older	20	3.7
Total no. of drivers (age known)	546	
Age not stated	40	
GRAND TOTAL	586	

The Motor Vehicle

Vehicle Action	Number of Vehicles	Percent
Going straight	391	65.6
Turning left	84	14.1
Turning right	49	8.2
Backing	12	2.0
Stopped in traffic	6	1.0
Parked	17	2.9
Making U-turn	1	6.2
Passing	16	
Changing lanes	3	
Merging	2	
Parking	3	
Slowing-stopping	4	
Unattended moving vehicle	0	
Other	8	
Total no. of vehicles (action stated)	596	
Action not stated	7	
GRAND TOTAL	603	

Note: Total number of vehicles includes parked motor vehicles involved in bicycle/motor vehicle accidents.

Bicycles

Type of Motor Vehicle Involed in Collision	Number of Vehicles	Percent
Automobile	447	76.3
Automobile/pickup with trailer or camper	3	0.5
Bus	0	--
School bus	1	0.2
Moped	19	3.2
Motorcycle	17	2.9
Farm vehicle	0	--
Motor home	0	--
Recreational vehicle	1	0.2
Panel/van/pickup	84	14.3
Straight truck	5	0.9
Tow/maintenance/ construction vehicle	2	0.3
Truck tractor	0	--
Truck tractor with trailer	1	0.2
Other	6	1.0
Total no. of vehicles (vehicle type stated)	586	
Type not stated	17	
GRAND TOTAL	603	

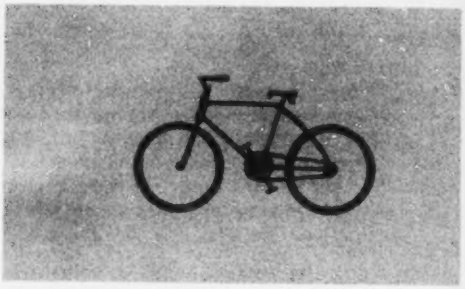
The Environment

Light	Number of Accidents	Percent
Dawn	1	0.2
Daylight	474	79.8
Dusk	23	3.9
Darkness (road lighted)	82	13.8
Darkness (road unlighted)	14	2.4
Total no. of accidents (light stated)	594	
Light not stated	5	
GRAND TOTAL	599	

Note: Figures indicate number of accidents involving bicycle/motor vehicle collisions occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	449	74.8
Cloudy	126	21.0
Fog	0	--
Mist	3	0.5
Rain	26	4.3
Sleet/hail	0	--
Snow	1	0.2
Strong wind	1	0.2
Other	2	0.3

Note: Some accident reports listed more than one type of weather condition. The percentages listed for each weather condition is based on the total number of accidents for this type of vehicle.



Traffic Controls	Number of Accidents	Percent
No controls	452	75.7
Traffic signals	63	10.6
Stop sign	69	11.6
Yield sign	5	2.2
No passing zone (marked)	4	
R.R. warning sign	0	
R.R. automatic signal	1	
R.R. crossing gate	0	
Other	3	
Total no. of accidents (control stated)	597	
Control not stated	2	
GRAND TOTAL	599	

The Bicyclist

Bicyclist Sex	Killed	Injured
Male	1	389
Female	1	155
Total no. of bicyclists (sex known)	2	544
Sex not stated	0	41
GRAND TOTAL	2	585

Bicyclist Age	Killed	Injured
0-4	0	9
5-9	0	125
10-14	1	176
15-19	0	117
20-24	0	55
25-44	1	69
45-64	0	9
65 & older	0	6
Total no. of bicyclists (age known)	2	566
Age not stated	0	19
GRAND TOTAL	2	585

Iowa Accidents Involving Mopeds

In 1983 there were:

- **6 moped operators or passengers killed**
- **485 moped operators or passengers injured**
- **523 accidents involving mopeds**
  - **6 fatal accidents involving mopeds**
  - **487 personal injury accidents involving mopeds**
  - **30 property damage accidents involving mopeds**

The Operator

Operator Action/ Contributing Circumstances	Number of Operators	Percent
Ran traffic control	6	1.1
Improper passing	4	0.7
Left of center, not passing	7	1.3
Failure to yield	32	5.9
Wrong way, one-way road	0	--
Speed too fast	12	2.2
Drag racing	0	--
Improper turn	7	1.3
Improper lane change	5	0.9
Following too close	14	2.6
Improper or no signal	4	0.7
Disregarded R.R. signal	0	--
Disregarded warning signal	0	--
Reckless driving	2	0.4
Improper backing	0	--
Illegal or improper parking	2	0.4
Failure to have control	77	14.2
Lights not on	3	0.6
Inattentive/distracted	43	7.9
Confused/inexperienced	50	9.2
Vision obscured	16	3.0
Oversized vehicle	0	--
Other	24	4.4

Note: From 0-2 actions/circumstances are listed for each operator involved in an accident.

Operator Condition	Number of Operators	Percent
Apparently normal	504	96.0
Drinking - impaired	8	1.5
Drinking - not impaired	8	1.5
Drugs	0	--
Physical defect	1	0.2
Fatigued	1	0.2
Apparently asleep	0	--
Ill	1	0.2
Under medication	1	0.2
Infirmities of age	1	0.2
Other	0	--
Total no. of operators (condition stated)	525	
Condition not stated	17	
GRAND TOTAL	542	

Operator Sex	Number of Operators	Percent
Male	371	68.7
Female	169	31.3
Total no. of operators (sex known)	540	
Sex not stated	2	
GRAND TOTAL	542	

Operator Age	Number of Operators	Percent
15 & younger	324	60.6
16	54	10.1
17	24	4.5
18	13	2.4
19	11	2.1
20-24	25	4.7
25-34	26	4.9
35-44	20	3.7
45-54	13	2.4
55-64	17	3.2
65-74	7	1.3
75 & older	1	0.2
Total no. of drivers (age known)	535	
Age not stated	7	
GRAND TOTAL	542	

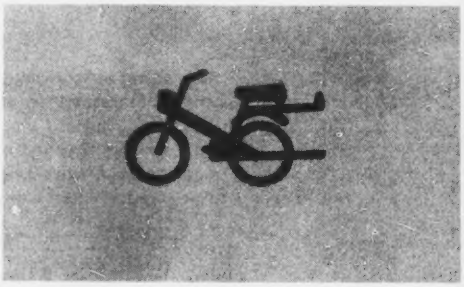
Note: In 1983 moped accidents, 86.8 percent of the moped riders who were killed or injured were not wearing helmets, 4.5 percent were wearing helmets, and helmet use was unknown or unreported for 8.7 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	392	73.4
Turning left	68	12.7
Turning right	34	6.4
Backing	2	0.4
Stopped in traffic	5	0.9
Parked	2	0.4
Making U-turn	2	5.8
Passing	3	
Changing lanes	7	
Merging	0	
Parking	1	
Slowing-stopping	9	
Unattended moving vehicle	0	
Other	9	
Total no. of vehicles (action stated)	534	
Action not stated	10	
GRAND TOTAL	544	

Note: Total number of vehicles includes parked mopeds involved in accidents.

Vehicle Defect	Number of Vehicles	Percent
None	399	96.1
Brakes	5	3.9
Lights	5	
Steering	0	
Tires	3	
Other	3	
Total no. of vehicles (defect stated)	415	
Defect not stated	129	
GRAND TOTAL	544	



Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	1	3.2
Underpass/bridge support	0	--
Building	0	--
Culvert	0	--
Curb	17	54.8
Ditch	3	9.7
Island/raised median	0	--
Embankment/retaining wall	0	--
Fence	1	3.2
Guardrail	1	3.2
Light pole	0	--
Sign post	2	6.5
Tree or shrubbery	0	--
Utility pole	0	--
Other pole or support	0	--
Mailbox	1	3.2
Impact attenuator	0	--
Other	5	16.1

5.7% of mopeds involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

The Environment

Light	Number of Accidents	Percent
Dawn	2	0.4
Daylight	396	75.7
Dusk	22	4.2
Darkness (road lighted)	73	14.0
Darkness (road unlighted)	30	5.7
Total no. of accidents (light stated)	523	
Light not stated		
GRAND TOTAL	523	

Note: Figures indicate number of accidents involving mopeds occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	402	76.9
Cloudy	103	19.7
Fog	1	0.2
Mist	8	1.5
Rain	14	2.7
Sleet/hail	0	--
Snow	4	0.8
Strong wind	3	0.6
Other	2	0.4

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Traffic Controls	Number of Accidents	Percent
No controls	440	84.5
Traffic signals	27	5.2
Stop sign	43	8.3
Yield sign	4	2.1
No passing zone (marked)	3	
R.R. warning sign	0	
R.R. automatic signal	0	
R.R. crossing gate	0	
Other	4	
Total no. of accidents (control stated)	521	
Control not stated	2	
GRAND TOTAL	523	

Iowa Accidents Involving Motorcycles

In 1983 there were:

54 motorcycle operators or passengers killed
2,079 motorcycle operators or passengers injured
2,192 accidents involving motorcycles
54 fatal accidents involving motorcycles
1,796 personal injury accidents involving motorcycles
342 property damage accidents involving motorcycles

The Operator

Operator Action/ Contributing Circumstances	Number of Operators	Percent
Ran traffic control	29	1.3
Improper passing	47	2.1
Left of center, not passing	21	0.9
Failure to yield	61	2.7
Wrong way, one-way road	1	--
Speed too fast	154	6.9
Drag racing	2	0.1
Improper turn	15	0.7
Improper lane change	12	0.5
Following too close	34	1.5
Improper or no signal	9	0.4
Disregarded R.R. signal	0	--
Disregarded warning signal	4	0.2
Reckless driving	25	1.1
Improper backing	1	--
Illegal or improper parking	0	--
Failure to have control	408	18.3
Lights not on	6	0.3
Inattentive/distracted	65	2.9
Confused/inexperienced	75	3.4
Vision obscured	81	3.6
Oversized vehicle	1	--
Other	110	4.9

Note: From 0-2 actions/circumstances are listed for each operator involved in an accident.

Operator Condition	Number of Operators	Percent
Apparently normal	1,844	87.0
Drinking - impaired	156	7.4
Drinking - not impaired	97	4.6
Drugs	1	--
Physical defect	3	0.1
Fatigued	7	0.3
Apparently asleep	2	0.1
Ill	1	--
Under medication	1	--
Infirmities of age	2	0.1
Other	5	0.2
Total no. of operators (condition stated)	2,119	
Condition not stated	114	
GRAND TOTAL	2,233	

Operator Sex	Number of Operators	Percent
Male	2,137	96.8
Female	71	3.2
Total no. of operators (sex known)	2,208	
Sex not stated	25	
GRAND TOTAL	2,233	

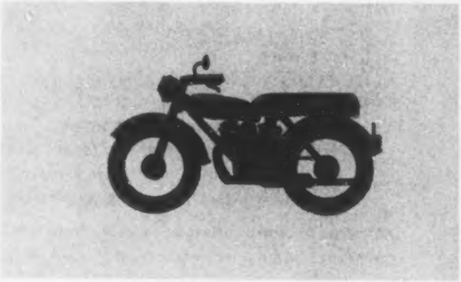
Operator Age	Number of Operators	Percent
15 & younger	71	3.2
16	46	2.1
17	86	3.9
18	185	8.4
19	156	7.1
20-24	664	30.3
25-34	652	29.7
35-44	217	9.9
45-54	64	2.9
55-64	35	1.6
65-74	14	0.6
75 & older	3	0.1
Total no. of operators (age known)	2,193	
Age not stated	40	
GRAND TOTAL	2,233	

Note: In 1983 motorcycle accidents, 75.4 percent of the motorcycle riders who were killed or injured were not wearing helmets, 14.3 percent were wearing helmets, and helmet use was unknown or unreported for 10.2 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	1,726	77.6
Turning left	137	6.2
Turning right	107	4.8
Backing	1	--
Stopped in traffic	26	1.2
Parked	36	1.6
Making U-turn	6	8.5
Passing	69	
Changing lanes	15	
Merging	6	
Parking	2	
Slowing-stopping	31	
Unattended moving vehicle	0	
Other	61	
Total no. of vehicles (action stated)	2,223	
Action not stated	46	
GRAND TOTAL	2,269	

Note: Total number of vehicles includes parked motorcycles involved in accidents.



Vehicle Defect	Number of Vehicles	Percent
None	1,537	95.5
Brakes	12	4.5
Lights	13	
Steering	6	
Tires	26	
Other	15	
Total no. of vehicles (defect stated)	1,609	
Defect not stated	660	
GRAND TOTAL	2,269	

Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	2	0.6
Underpass/bridge support	1	0.3
Building	9	2.6
Culvert	11	3.1
Curb	59	16.9
Ditch	108	30.9
Island/raised median	15	4.3
Embankment/retaining wall	5	1.4
Fence	16	4.6
Guardrail	8	2.3
Light pole	12	3.4
Sign post	14	4.0
Tree or shrubbery	14	4.0
Utility pole	11	3.1
Other pole or support	7	2.0
Mailbox	6	1.7
Impact attenuator	1	0.3
Other	51	14.6

15.6% of motorcycles involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

The Environment

Light	Number of Accidents	Percent
Dawn	15	0.7
Daylight	1,371	62.9
Dusk	91	4.2
Darkness (road lighted)	429	19.7
Darkness (road unlighted)	274	12.6
Total no. of accidents (light stated)	2,180	
Light not stated	12	
GRAND TOTAL	2,192	

Note: Figures indicate number of accidents involving motorcycles occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	1,702	77.6
Cloudy	405	18.5
Fog	4	0.2
Mist	22	1.0
Rain	61	2.8
Sleet/hail	1	--
Snow	6	0.3
Strong wind	11	0.5
Other	6	0.3

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Traffic Controls	Number of Accidents	Percent
No controls	1,738	79.5
Traffic signals	191	8.7
Stop sign	122	5.6
Yield sign	8	6.2
No passing zone (marked)	31	
R.R. warning sign	1	
R.R. automatic signal	3	
R.R. crossing gate	0	
Other	92	
Total no. of accidents (control stated)	2,186	
Control not stated	6	
GRAND TOTAL	2,192	

Iowa Accidents Involving Farm Vehicles

In 1983 there were:

- **13 farm vehicle occupants killed**
- **54 farm vehicle occupants injured**
- **337 accidents involving farm vehicles**
  - **15 fatal accidents involving farm vehicles**
  - **124 personal injury accidents involving farm vehicles**
  - **198 property damage accidents involving farm vehicles**

15 persons were killed in farm vehicle accidents. Of this number, 2 (13.3 percent) were not farm vehicle occupants.

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	2	0.6
Improper passing	3	0.9
Left of center, not passing	11	3.4
Failure to yield	37	11.5
Wrong way, one-way road	0	--
Speed too fast	0	--
Drag racing	0	--
Improper turn	5	1.6
Improper lane change	2	0.6
Following too close	0	--
Improper or no signal	20	6.2
Disregarded R.R. signal	0	--
Disregarded warning signal	1	0.3
Reckless driving	0	--
Improper backing	2	0.6
Illegal or improper parking	1	0.3
Failure to have control	11	3.4
Lights not on	2	0.6
Inattentive/distracted	13	4.0
Confused/inexperienced	4	1.2
Vision obscured	22	6.8
Oversized vehicle	5	1.6
Other	22	6.8

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	304	96.8
Drinking - impaired	3	1.0
Drinking - not impaired	1	0.3
Drugs	0	--
Physical defect	3	1.0
Fatigued	0	--
Apparently asleep	0	--
Ill	1	0.3
Under medication	0	--
Infirmities of age	2	0.6
Other	0	--
Total no. of drivers (condition stated)	314	
Condition not stated	8	
GRAND TOTAL	322	

Driver Sex	Number of Drivers	Percent
Male	307	95.6
Female	14	4.4
Total no. of drivers (sex known)	321	
Sex not stated	1	
GRAND TOTAL	322	

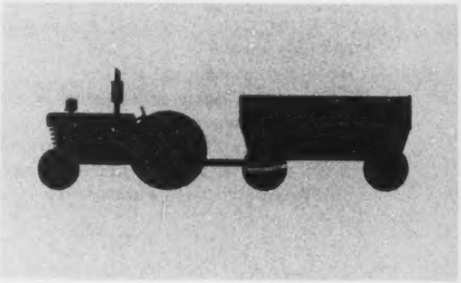
Driver Age	Number of Drivers	Percent
15 & younger	19	6.1
16	9	2.9
17	5	1.6
18	3	1.0
19	7	2.2
20-24	51	16.2
25-34	86	27.4
35-44	45	14.3
45-54	32	10.2
55-64	32	10.2
65-74	20	6.4
75 & older	5	1.6
Total no. of drivers (age known)	314	
Age not stated	8	
GRAND TOTAL	322	

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	178	54.1
Turning left	96	29.2
Turning right	11	3.3
Backing	8	2.4
Stopped in traffic	6	1.8
Parked	13	4.0
Making U-turn	2	5.2
Passing	1	
Changing lanes	3	
Merging	1	
Parking	1	
Slowing-stopping	3	
Unattended moving vehicle	2	
Other	4	
Total no. of vehicles (action stated)	329	
Action not stated	8	
GRAND TOTAL	337	

Note: Total number of vehicles includes parked farm vehicles involved in accidents.

Farm Vehicles



Vehicle Defect	Number of Vehicles	Percent
None	238	92.6
Brakes	2	7.4
Lights	5	
Steering	1	
Wipers	0	
Tires	2	
Trailer hitch	1	
Other	8	
Total no. of vehicles (defect stated)	257	
Defect not stated	80	
GRAND TOTAL	337	

Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	6	18.8
Underpass/bridge support	0	--
Building	0	--
Culvert	0	--
Curb	0	--
Ditch	15	46.9
Island/raised median	0	--
Embankment/retaining wall	2	6.3
Fence	2	6.3
Guardrail	2	6.3
Light pole	1	3.1
Sign post	0	--
Tree or shrubbery	2	6.3
Utility pole	1	3.1
Other pole or support	1	3.1
Mailbox	0	--
Impact attenuator	0	--
Other	0	--

9.5% of farm vehicles involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

The Environment

Light	Number of Accidents	Percent
Dawn	2	0.6
Daylight	271	80.7
Dusk	11	3.3
Darkness (road lighted)	8	2.4
Darkness (road unlighted)	44	13.1
Total no. of accidents (light stated)	336	
Light not stated	1	
GRAND TOTAL	337	

Note: Figures indicate number of accidents involving farm vehicles occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	233	69.1
Cloudy	81	24.0
Fog	3	0.9
Mist	10	3.0
Rain	6	1.8
Sleet/hail	0	--
Snow	6	1.8
Strong wind	5	1.5
Other	0	--

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Traffic Controls	Number of Accidents	Percent
No controls	291	86.4
Traffic signals	11	3.3
Stop sign	11	3.3
Yield sign	1	7.1
No passing zone (marked)	8	
R.R. warning sign	1	
R.R. automatic signal	0	
R.R. crossing gate	0	
Other	14	
Total no. of accidents (control stated)	337	
Control not stated		
GRAND TOTAL	337	

Iowa Accidents Involving

Motor Homes

In 1983 there were:
- **1 motor home occupant killed**
- **29 motor home occupants injured**
- **81 accidents involving motor homes**
  - **1 fatal accident involving motor homes**
  - **23 personal injury accidents involving motor homes**
  - **57 property damage accidents involving motor homes**

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	2	2.6
Improper passing	0	--
Left of center, not passing	1	1.3
Failure to yield	8	10.4
Wrong way, one-way road	0	--
Speed too fast	5	6.5
Drag racing	0	--
Improper turn	2	2.6
Improper lane change	3	3.9
Following too close	0	--
Improper or no signal	0	--
Disregarded R.R. signal	0	--
Disregarded warning signal	0	--
Reckless driving	0	--
Improper backing	1	1.3
Illegal or improper parking	0	--
Failure to have control	3	3.9
Lights not on	0	--
Inattentive/distracted	2	2.6
Confused/inexperienced	0	--
Vision obscured	3	3.9
Oversized vehicle	1	1.3
Other	3	3.9

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	72	94.7
Drinking - impaired	2	2.6
Drinking - not impaired	2	2.6
Drugs	0	--
Physical defect	0	--
Fatigued	0	--
Apparently asleep	0	--
Ill	0	--
Under medication	0	--
Infirmities of age	0	--
Other	0	--
Total no. of drivers (condition stated)	76	
Condition not stated	1	
GRAND TOTAL	77	

Driver Sex	Number of Drivers	Percent
Male	69	89.6
Female	8	10.4
Total no. of drivers (sex known)	77	
Sex not stated		
GRAND TOTAL	77	

Driver Age	Number of Drivers	Percent
15 & younger	1	1.3
16	0	--
17	0	--
18	0	--
19	2	2.7
20-24	3	4.0
25-34	9	12.0
35-44	11	14.7
45-54	15	20.0
55-64	14	18.7
65-74	18	24.0
75 & older	2	2.7
Total no. of drivers (age known)	75	
Age not stated	2	
GRAND TOTAL	77	

Note: In 1983 motor home accidents, 96.7 percent of the motor home occupants who were injured were not wearing seat belts. 0.0 percent were wearing seat belts, and seat belt use was unknown or unreported for 3.3 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	49	59.8
Turning left	6	7.3
Turning right	2	2.4
Backing	2	2.4
Stopped in traffic	2	2.4
Parked	8	9.8
Making U-turn	1	15.9
Passing	2	
Changing lanes	3	
Merging	1	
Parking	0	
Slowing-stopping	5	
Unattended moving vehicle	0	
Other	1	
Total no. of vehicles (action stated)	82	
Action not stated	3	
GRAND TOTAL	85	

Note: Total number of vehicles includes parked motor homes involved in accidents.

Motor Homes

Vehicle Defect	Number of Vehicles	Percent
None	60	95.2
Brakes	0	4.8
Lights	0	
Steering	0	
Wipers	0	
Tires	1	
Trailer hitch	1	
Other	1	
Total no. of vehicles (defect stated)	63	
Defect not stated	22	
GRAND TOTAL	85	

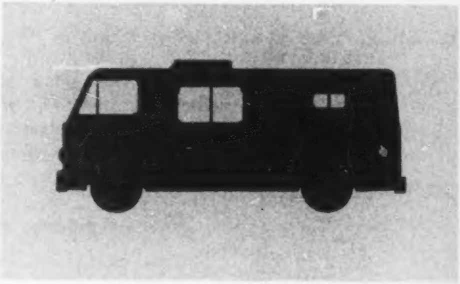
The Environment

Light	Number of Accidents	Percent
Dawn	0	--
Daylight	57	71.3
Dusk	1	1.3
Darkness (road lighted)	9	11.3
Darkness (road unlighted)	13	16.3
Total no. of accidents (light stated)	80	
Light not stated	1	
GRAND TOTAL	81	

Note: Figures indicate number of accidents involving motor homes occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	46	56.8
Cloudy	24	29.6
Fog	0	--
Mist	3	3.7
Rain	9	11.1
Sleet/hail	1	1.2
Snow	5	6.2
Strong wind	2	2.5
Other	1	1.2

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.



Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	2	22.2
Underpass/bridge support	0	--
Building	0	--
Culvert	1	11.1
Curb	0	--
Ditch	3	33.3
Island/raised median	0	--
Embankment/retaining wall	0	--
Fence	1	11.1
Guardrail	0	--
Light pole	1	11.1
Sign post	0	--
Tree or shrubbery	0	--
Utility pole	0	--
Other pole or support	0	--
Mailbox	0	--
Impact attenuator	0	--
Other	1	11.1

10.6% of motor homes involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

Traffic Controls	Number of Accidents	Percent
No controls	59	72.8
Traffic signals	7	8.6
Stop sign	7	8.6
Yield sign	1	9.9
No passing zone (marked)	3	
R.R. warning sign	0	
R.R. automatic signal	0	
R.R. crossing gate	0	
Other	4	
Total no. of accidents (control stated)	81	
Control not stated		
GRAND TOTAL	81	

Iowa Accidents Involving
Recreational Vehicles

In 1983 there were:

- **3 recreational vehicle occupants killed**
- **158 recreational vehicle occupants injured**
- **454 accidents involving recreational vehicles**
  - **3 fatal accidents involving recreational vehicles**
  - **145 personal injury accidents involving recreational vehicles**
  - **306 property damage accidents involving recreational vehicles**

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	11	2.6
Improper passing	5	1.2
Left of center, not passing	6	1.4
Failure to yield	23	5.3
Wrong way, one-way road	1	0.2
Speed too fast	22	5.1
Drag racing	0	--
Improper turn	3	0.7
Improper lane change	8	1.9
Following too close	14	3.2
Improper or no signal	2	0.5
Disregarded R.R. signal	0	--
Disregarded warning signal	0	--
Reckless driving	4	0.9
Improper backing	8	1.9
Illegal or improper parking	1	0.2
Failure to have control	52	12.1
Lights not on	1	0.2
Inattentive/distracted	19	4.4
Confused/inexperienced	7	1.6
Vision obscured	24	5.6
Oversized vehicle	0	--
Other	26	6.0

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	379	91.5
Drinking - impaired	13	3.1
Drinking - not impaired	14	3.4
Drugs	0	--
Physical defect	0	--
Fatigued	1	0.2
Apparently asleep	4	1.0
Ill	2	0.5
Under medication	0	--
Infirmities of age	0	--
Other	1	0.2
Total no. of drivers (condition stated)	414	
Condition not stated	17	
GRAND TOTAL	431	

Driver Sex	Number of Drivers	Percent
Male	314	74.1
Female	110	25.9
Total no. of drivers (sex known)	424	
Sex not stated	7	
GRAND TOTAL	431	

Driver Age	Number of Drivers	Percent
15 & younger	8	1.9
16	11	2.7
17	17	4.1
18	11	2.7
19	11	2.7
20-24	64	15.6
25-34	131	31.9
35-44	70	17.0
45-54	47	11.4
55-64	29	7.1
65-74	11	2.7
75 & older	1	0.2
Total no. of drivers (age known)	411	
Age not stated	20	
GRAND TOTAL	431	

Note: In 1983 recreational vehicle accidents, 74.5 percent of the recreational vehicle occupants who were killed or injured were not wearing seat belts, 2.5 percent were wearing seat belts, and seat belt use was unknown or unreported for 23.0 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	292	66.2
Turning left	36	8.2
Turning right	13	3.0
Backing	14	3.2
Stopped in traffic	17	3.9
Parked	30	6.8
Making U-turn	2	8.8
Passing	8	
Changing lanes	7	
Merging	2	
Parking	3	
Slowing-stopping	9	
Unattended moving vehicle	1	
Other	7	
Total no. of vehicles (action stated)	441	
Action not stated	21	
GRAND TOTAL	462	

Note: Total number of vehicles includes parked recreational vehicles involved in accidents.

Vehicle Defect	Number of Vehicles	Percent
None	299	96.8
Brakes	2	3.2
Lights	0	
Steering	0	
Wipers	0	
Tires	3	
Trailer hitch	1	
Other	4	
Total no. of vehicles (defect stated)	309	
Defect not stated	153	
GRAND TOTAL	462	

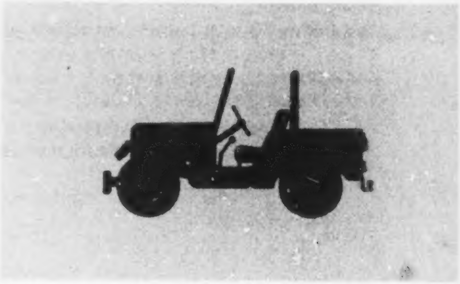
The Environment

Light	Number of Accidents	Percent
Dawn	4	0.9
Daylight	289	63.9
Dusk	23	5.1
Darkness (road lighted)	75	16.6
Darkness (road unlighted)	61	13.5
Total no. of accidents (light stated)	452	
Light not stated	2	
GRAND TOTAL	454	

Note: Figures indicate number of accidents involving recreational vehicles occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	231	50.9
Cloudy	144	31.7
Fog	4	0.9
Mist	12	2.6
Rain	40	8.8
Sleet/hail	1	0.2
Snow	42	9.3
Strong wind	9	2.0
Other	0	--

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.



Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	3	4.1
Underpass/bridge support	1	1.4
Building	0	--
Culvert	2	2.7
Curb	4	5.5
Ditch	22	30.1
Island/raised median	2	2.7
Embankment/retaining wall	2	2.7
Fence	4	5.5
Guardrail	2	2.7
Light pole	6	8.2
Sign post	5	6.8
Tree or shrubbery	3	4.1
Utility pole	7	9.6
Other pole or support	0	--
Mailbox	0	--
Impact attenuator	0	--
Other	10	13.7

15.8% of recreational vehicles involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

Traffic Controls	Number of Accidents	Percent
No controls	366	81.0
Traffic signals	45	10.0
Stop sign	28	6.2
Yield sign	1	2.9
No passing zone (marked)	4	
R.R. warning sign	0	
R.R. automatic signal	0	
R.R. crossing gate	0	
Other	8	
Total no. of accidents (control stated)	452	
Control not stated	2	
GRAND TOTAL	454	

Iowa Accidents Involving Trains

(All figures apply to train/motor vehicle accidents at public crossings. Private crossing accident information is not included. All 8 persons killed were motor vehicle drivers, riders or occupants.)

In 1983 there were:

- **10 persons killed in train/motor vehicle accidents**
- **61 persons injured in train/motor vehicle accidents**
- **144 train/motor vehicle accidents involving 144 trains and 144 vehicles**
  - **7 fatal accidents involving trains/motor vehicles**
  - **49 personal injury accidents involving trains/motor vehicles**
  - **88 property damage accidents involving trains/motor vehicles**

The Driver Of Motor Vehicle Involved

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	2	1.4
Improper passing	0	--
Left of center, not passing	1	0.7
Failure to yield	7	4.9
Wrong way, one-way road	0	--
Speed too fast	5	3.5
Drag racing	0	--
Improper turn	0	--
Improper lane change	1	0.7
Following too close	0	--
Improper or no signal	0	--
Disregarded R.R. signal	31	21.8
Disregarded warning signal	7	4.9
Reckless driving	0	--
Improper backing	1	0.7
Illegal or improper parking	1	0.7
Failure to have control	9	6.3
Lights not on	1	0.7
Inattentive/distracted	15	10.6
Confused/inexperienced	3	2.1
Vision obscured	14	9.9
Oversized vehicle	0	--
Other	11	7.7

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident

Driver Condition	Number of Drivers	Percent
Apparently normal	119	86.2
Drinking - impaired	6	4.3
Drinking - not impaired	9	6.5
Drugs	0	--
Physical defect	0	--
Fatigued	0	--
Apparently asleep	2	1.4
Ill	0	--
Under medication	0	--
Infirmities of age	0	--
Other	2	1.4
Total no. of drivers (condition stated)	138	
Condition not stated	4	
GRAND TOTAL	142	

Driver Sex	Number of Drivers	Percent
Male	110	79.1
Female	29	20.9
Total no. of drivers (sex known)	139	
Sex not stated	3	
GRAND TOTAL	142	

Driver Age	Number of Drivers	Percent
15 & younger	1	0.7
16	2	1.4
17	5	3.6
18	12	8.7
19	6	4.3
20-24	29	21.0
25-34	34	24.6
35-44	18	13.0
45-54	15	10.9
55-64	11	8.0
65-74	4	2.9
75 & older	1	0.7
Total no. of drivers (age known)	138	
Age not stated	4	
GRAND TOTAL	142	

Note: In 1983 train/motor vehicle accidents, 65.2 percent of the motor vehicle occupants who were killed or injured were not wearing seat belts. 0 percent were wearing seat belts, and seat belt use was unknown or unreported for 34.8 percent of those killed or injured.

The Motor Vehicle

Vehicle Action	Number of Vehicles	Percent
Going straight	119	84.4
Turning left	1	0.7
Turning right	0	--
Backing	2	1.4
Stopped in traffic	6	4.3
Parked	2	1.4
Making U-turn	0	7.8
Passing	0	
Changing lanes	1	
Merging	1	
Parking	0	
Slowing-stopping	3	
Unattended moving vehicle	0	
Other	6	
Total no. of vehicles (action stated)	141	
Action not stated	3	
GRAND TOTAL	144	

Note: Total number of vehicles includes parked motor vehicles involved in train/motor vehicle accidents.

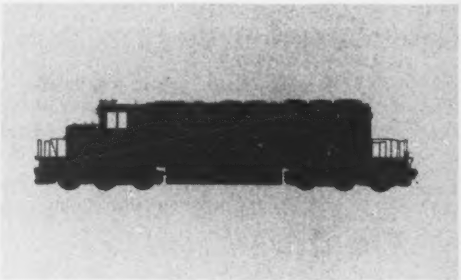
Vehicle Defect	Number of Vehicles	Percent
None	95	96.9
Brakes	0	3.1
Lights	0	
Steering	0	
Wipers	0	
Tires	1	
Trailer hitch	0	
Other	2	
Total no. of vehicles (defect stated)	98	
Defect not stated	46	
GRAND TOTAL	144	

Type of Motor Vehicle Involved in Collision	Number of Vehicles	Percent
Automobile	98	68.1
Automobile/pickup with trailer or camper	2	1.4
Bus	0	--
School bus	0	--
Moped	0	--
Motorcycle	0	--
Farm vehicle	1	0.7
Motor home	0	--
Recreational vehicle	0	--
Panel/van/pickup	24	16.7
Straight truck	6	4.2
Tow/maintenance/construction vehicles	2	1.4
Truck tractor	0	--
Truck tractor with trailer	10	6.9
Other	1	0.7
Total no. of vehicles (vehicle type stated)	144	
Type not stated		
GRAND TOTAL	144	

The Environment

Light	Number of Accidents	Percent
Dawn	2	1.4
Daylight	68	47.2
Dusk	3	2.1
Darkness (road lighted)	45	31.3
Darkness (road unlighted)	26	18.1
Total no. of accidents (light stated)	144	
Light not stated		
GRAND TOTAL	144	

Note: Figures indicate number of accidents involving train/motor vehicle collisions occurring under the conditions indicated.



Weather	Number of Accidents	Percent
Clear	79	54.9
Cloudy	46	31.9
Fog	3	2.1
Mist	8	5.6
Rain	10	6.9
Sleet/hail	0	--
Snow	7	4.9
Strong wind	1	0.7
Other	0	--

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Traffic Controls	Number of Accidents	Percent
No controls	30	21.0
Traffic signals	2	1.4
Stop sign	9	6.3
Yield sign	0	--
No passing zone (marked)	0	--
R.R. warning sign	54	37.8
R.R. automatic signal	29	20.3
R.R. crossing gate	8	5.6
Other	11	7.7
Total no. of accidents (control stated)	143	
Control not stated	1	
GRAND TOTAL	144	

Iowa Accidents Involving Panels/Vans/Pickups

In 1983 there were:

- **71 panel/van/pickup occupants killed**
- **3,067 panel/van/pickup occupants injured**
- **14,814 accidents involving panels/vans/pickups**
  - **104 fatal accidents involving panels/vans/pickups**
  - **3,866 personal injury accidents involving panels/vans/pickups**
  - **10,844 property damage accidents involving panels/vans/pickups**

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	343	2.3
Improper passing	114	0.8
Left of center, not passing	204	1.4
Failure to yield	1,307	8.8
Wrong way, one-way road	9	--
Speed too fast	635	4.3
Drag racing	2	--
Improper turn	140	0.9
Improper lane change	137	0.9
Following too close	233	1.6
Improper or no signal	73	0.5
Disregarded R.R. signal	8	--
Disregarded warning signal	16	0.1
Reckless driving	75	0.5
Improper backing	255	1.7
Illegal or improper parking	36	0.2
Failure to have control	1,530	10.3
Lights not on	9	--
Inattentive/distracted	535	3.6
Confused/inexperienced	173	1.2
Vision obscured	918	6.2
Oversized vehicle	4	--
Other	558	3.7

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	13,370	92.2
Drinking - impaired	510	3.5
Drinking - not impaired	362	2.5
Drugs	3	--
Physical defect	20	0.1
Fatigued	59	0.4
Apparently asleep	79	0.5
Ill	7	--
Under medication	13	0.1
Infirmities of age	25	0.2
Other	46	0.3
Total no. of drivers (condition stated)	14,494	
Condition not stated	416	
GRAND TOTAL	14,910	

Driver Sex	Number of Drivers	Percent
Male	12,737	86.9
Female	1,919	13.1
Total no. of drivers (sex known)	14,656	
Sex not stated	254	
GRAND TOTAL	14,910	

Driver Age	Number of Drivers	Percent
15 & younger	73	0.5
16	439	3.0
17	561	3.9
18	598	4.1
19	555	3.8
20-24	2,614	18.1
25-34	3,981	27.6
35-44	2,168	15.0
45-54	1,500	10.4
55-64	1,252	8.7
65-74	522	3.6
75 & older	162	1.1
Total no. of drivers (age known)	14,425	
Age not stated	485	
GRAND TOTAL	14,910	

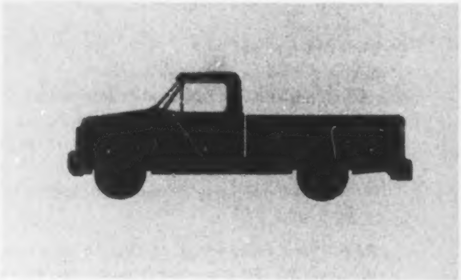
Note: In 1983 panel/van/pickup accidents, 74.8 percent of the panel/van/pickup occupants who were killed or injured were not wearing seat belts, 2.2 percent were wearing seat belts, and seat belt use was unknown or unreported for 23.1 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	9,914	64.0
Turning left	1,543	10.0
Turning right	528	3.4
Backing	585	3.8
Stopped in traffic	598	3.9
Parked	1,159	7.5
Making U-turn	44	7.5
Passing	160	
Changing lanes	191	
Merging	73	
Parking	30	
Slowing-stopping	392	
Unattended moving vehicle	33	
Other	239	
Total no. of vehicles (action stated)	15,489	
Action not stated	613	
GRAND TOTAL	16,102	

Note: Total number of vehicles includes parked panels/vans/pickups involved in accidents.

Panels/Vans/Pickups



Vehicle Defect	Number of Vehicles	Percent
None	10,287	97.0
Brakes	94	3.0
Lights	25	
Steering	30	
Wipers	6	
Tires	70	
Trailer hitch	10	
Other	85	
Total no. of vehicles (defect stated)	10,607	
Defect not stated	5,495	
GRAND TOTAL	16,102	

The Environment

Light	Number of Accidents	Percent
Dawn	178	1.2
Daylight	9,693	66.0
Dusk	507	3.5
Darkness (road lighted)	2,414	16.4
Darkness (road unlighted)	1,889	12.9
Total no. of accidents (light stated)	14,681	
Light not stated	133	
GRAND TOTAL	14,814	

Note: Figures indicate number of accidents involving panels/vans/pickups occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	7,805	52.7
Cloudy	4,480	30.2
Fog	223	1.5
Mist	455	3.1
Rain	976	6.6
Sleet/hail	115	0.8
Snow	1,272	8.6
Strong wind	286	1.9
Other	40	0.3

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	97	4.6
Underpass/bridge support	6	0.3
Building	70	3.3
Culvert	50	2.4
Curb	43	2.0
Ditch	599	28.3
Island/raised median	19	0.9
Embankment/retaining wall	56	2.6
Fence	158	7.5
Guardrail	84	4.0
Light pole	178	8.4
Sign post	133	6.3
Tree or shrubbery	136	6.4
Utility pole	189	8.9
Other pole or support	53	2.5
Mailbox	40	1.9
Impact attenuator	24	1.1
Other	184	8.7

13.2% of panels/vans/pickups involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

Traffic Controls	Number of Accidents	Percent
No controls	11,067	75.0
Traffic signals	1,622	11.0
Stop sign	1,463	9.9
Yield sign	137	4.1
No passing zone (marked)	116	
R.R. warning sign	19	
R.R. automatic signal	16	
R.R. crossing gate	2	
Other	312	
Total no. of accidents (control stated)	14,754	
Control not stated	60	
GRAND TOTAL	14,814	

Iowa Accidents Involving Straight Trucks

In 1983 there were:
- **8 straight truck occupants killed**
- **188 straight truck occupants injured**
- **1,556 accidents involving straight trucks**
  - **24 fatal accidents involving straight trucks**
  - **421 personal injury accidents involving straight trucks**
  - **1,111 property damage accidents involving straight trucks**

27 persons were killed in straight truck accidents. Of this number 19 (70.4 percent) were not straight truck occupants.

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	42	2.7
Improper passing	20	1.3
Left of center, not passing	19	1.2
Failure to yield	119	7.7
Wrong way, one-way road	2	0.1
Speed too fast	50	3.3
Drag racing	0	--
Improper turn	30	2.0
Improper lane change	25	1.6
Following too close	37	2.4
Improper or no signal	8	0.5
Disregarded R.R. signal	2	0.1
Disregarded warning signal	4	0.3
Reckless driving	2	0.1
Improper backing	45	2.9
Illegal or improper parking	6	0.4
Failure to have control	123	8.0
Lights not on	0	--
Inattentive/distracted	55	3.6
Confused/inexperienced	18	1.2
Vision obscured	112	7.3
Oversized vehicle	8	0.5
Other	102	6.6

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	1,465	96.8
Drinking - impaired	14	0.9
Drinking - not impaired	7	0.5
Drugs	0	--
Physical defect	2	0.1
Fatigued	8	0.5
Apparently asleep	5	0.3
Ill	1	0.1
Under medication	0	--
Infirmities of age	2	0.1
Other	9	0.6
Total no. of drivers (condition stated)	1,513	
Condition not stated	24	
GRAND TOTAL	1,537	

Driver Sex	Number of Drivers	Percent
Male	1,485	97.9
Female	32	2.1
Total no. of drivers (sex known)	1,517	
Sex not stated	20	
GRAND TOTAL	1,537	

Driver Age	Number of Drivers	Percent
15 & younger	1	0.1
16	6	0.4
17	7	0.5
18	28	1.9
19	35	2.3
20-24	328	22.0
25-34	481	32.2
35-44	234	15.7
45-54	178	11.9
55-64	153	10.2
65-74	38	2.5
75 & older	5	0.3
Total no. of drivers (age known)	1,494	
Age not stated	43	
GRAND TOTAL	1,537	

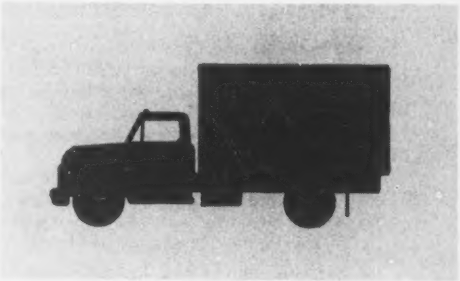
Note: In 1983 straight truck accidents, 73.0 percent of the straight truck occupants who were killed or injured were not wearing seat belts, 2.6 percent were wearing seat belts, and seat belt use was unknown or unreported for 24.5 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	928	59.6
Turning left	158	10.2
Turning right	118	7.6
Backing	89	5.7
Stopped in traffic	57	3.7
Parked	52	3.3
Making U-turn	1	9.9
Passing	31	
Changing lanes	27	
Merging	9	
Parking	2	
Slowing-stopping	59	
Unattended moving vehicle	7	
Other	18	
Total no. of vehicles (action stated)	1,556	
Action not stated	40	
GRAND TOTAL	1,596	

Note: Total number of vehicles includes parked straight trucks involved in accidents.

Straight Trucks



Vehicle Defect	Number of Vehicles	Percent
None	1,117	90.7
Brakes	54	9.3
Lights	10	
Steering	5	
Wipers	1	
Tires	21	
Trailer hitch	3	
Other	20	
Total no. of vehicles (defect stated)	1,231	
Defect not stated	365	
GRAND TOTAL	1,596	

The Environment

Light	Number of Accidents	Percent
Dawn	17	1.1
Daylight	1,336	86.2
Dusk	24	1.5
Darkness (road lighted)	86	5.5
Darkness (road unlighted)	87	5.6
Total no. of accidents (light stated)	1,550	
Light not stated	6	
GRAND TOTAL	1,556	

Note: Figures indicate number of accidents involving straight trucks occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	890	57.2
Cloudy	476	30.6
Fog	26	1.7
Mist	30	1.9
Rain	77	4.9
Sleet/hail	8	0.5
Snow	103	6.6
Strong wind	31	2.0
Other	3	0.2

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	20	8.4
Underpass/bridge support	1	0.4
Building	4	1.7
Culvert	5	2.1
Curb	3	1.3
Ditch	89	37.4
Island/raised median	1	0.4
Embankment/retaining wall	3	1.3
Fence	17	7.1
Guardrail	6	2.5
Light pole	22	9.2
Sign post	14	5.9
Tree or shrubbery	0	--
Utility pole	13	5.5
Other pole or support	5	2.1
Mailbox	0	--
Impact attenuator	0	--
Other	35	14.7

14.9% of straight trucks involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

Traffic Controls	Number of Accidents	Percent
No controls	1,096	70.6
Traffic signals	199	12.8
Stop sign	160	10.3
Yield sign	7	6.3
No passing zone (marked)	19	
R.R. warning sign	5	
R.R. automatic signal	4	
R.R. crossing gate	0	
Other	63	
Total no. of accidents (control stated)	1,553	
Control not stated	3	
GRAND TOTAL	1,556	

Iowa Accidents Involving

Tow/Maintenance/ Construction Vehicles

In 1983 there were:

- **2 tow/maintenance/construction vehicle occupants killed**
- **48 tow/maintenance/construction vehicle occupants injured**
- **482 accidents involving tow/maintenance/construction vehicles**
  - **8 fatal accidents involving tow/maintenance/ construction vehicles**
  - **114 personal injury accidents involving tow/ maintenance/construction vehicles**
  - **360 property damage accidents involving tow/ maintenance/construction vehicles**

8 persons were killed in tow/maintenance/construction vehicle accidents. Of this number 6 (75.0 percent) were not tow/ maintenance/construction vehicle occupants.

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	5	1.1
Improper passing	1	0.2
Left of center, not passing	6	1.3
Failure to yield	32	7.0
Wrong way, one-way road	0	--
Speed too fast	6	1.3
Drag racing	0	--
Improper turn	5	1.1
Improper lane change	6	1.3
Following too close	4	0.9
Improper or no signal	4	0.9
Disregarded R.R. signal	0	--
Disregarded warning signal	2	0.4
Reckless driving	1	0.2
Improper backing	23	5.0
Illegal or improper parking	2	0.4
Failure to have control	25	5.4
Lights not on	0	--
Inattentive/distracted	15	3.3
Confused/inexperienced	3	0.7
Vision obscured	33	7.2
Oversized vehicle	2	0.4
Other	29	6.3

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	450	98.7
Drinking - impaired	3	0.7
Drinking - not impaired	1	0.2
Drugs	0	--
Physical defect	1	0.2
Fatigued	0	--
Apparently asleep	0	--
Ill	0	--
Under medication	0	--
Infirmities of age	0	--
Other	1	0.2
Total no. of drivers (condition stated)	456	
Condition not stated	3	
GRAND TOTAL	459	

Driver Sex	Number of Drivers	Percent
Male	435	97.3
Female	12	2.7
Total no. of drivers (sex known)	447	
Sex not stated	12	
GRAND TOTAL	459	

Driver Age	Number of Drivers	Percent
15 & younger	0	--
16	1	0.2
17	1	0.2
18	11	2.5
19	5	1.1
20-24	53	12.0
25-34	152	34.3
35-44	77	17.4
45-54	66	14.9
55-64	69	15.6
65-74	8	1.8
75 & older	0	--
Total no. of drivers (age known)	443	
Age not stated	16	
GRAND TOTAL	459	

Note: In 1983 tow/maintenance/construction accidents, 80.0 percent of the tow/-maintenance/construction vehicle occupants who were killed or injured were not wearing seat belts, 2.0 percent were wearing seat belts, and seat belt use was unknown or unreported for 18.0 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	245	52.4
Turning left	57	12.2
Turning right	15	3.2
Backing	59	12.6
Stopped in traffic	18	3.8
Parked	25	5.3
Making U-turn	8	10.5
Passing	2	
Changing lanes	7	
Merging	3	
Parking	2	
Slowing-stopping	5	
Unattended moving vehicle	2	
Other	20	
Total no. of vehicles (action stated)	468	
Action not stated	18	
GRAND TOTAL	486	

Note: Total number of vehicles includes parked tow/maintenance/construction vehicles involved in accidents.

Tow/Maintenance/ Construction Vehicles

Vehicle Defect	Number of Vehicles	Percent
None	342	94.7
Brakes	6	5.3
Lights	2	
Steering	0	
Wipers	0	
Tires	2	
Trailer hitch	0	
Other	9	
Total no. of vehicles (defect stated)	361	
Defect not stated	125	
GRAND TOTAL	486	

Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	1	3.1
Underpass/bridge support	0	--
Building	1	3.1
Culvert	0	--
Curb	0	--
Ditch	9	28.1
Island/raised median	0	--
Embankment/retaining wall	0	--
Fence	2	6.3
Guardrail	0	--
Light pole	3	9.4
Sign post	3	9.4
Tree or shrubbery	0	--
Utility pole	6	18.8
Other pole or support	2	6.3
Mailbox	1	3.1
Impact attenuator	0	--
Other	4	12.5

6.6% of tow/maintenance/construction vehicles involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

The Environment

Light	Number of Accidents	Percent
Dawn	5	1.0
Daylight	381	79.2
Dusk	10	2.1
Darkness (road lighted)	49	10.2
Darkness (road unlighted)	36	7.5
Total no. of accidents (light stated)	481	
Light not stated	1	
GRAND TOTAL	482	

Note: Figures indicate number of accidents involving tow/maintenance/construction vehicles occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	245	50.8
Cloudy	153	31.7
Fog	4	0.8
Mist	11	2.3
Rain	16	3.3
Sleet/hail	3	0.6
Snow	67	13.9
Strong wind	22	4.6
Other	1	0.2

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Traffic Controls	Number of Accidents	Percent
No controls	348	72.3
Traffic signals	49	10.2
Stop sign	50	10.4
Yield sign	4	7.1
No passing zone (marked)	6	
R.R. warning sign	3	
R.R. automatic signal	1	
R.R. crossing gate	0	
Other	20	
Total no. of accidents (control stated)	481	
Control not stated	1	
GRAND TOTAL	482	

Iowa Accidents Involving
Truck Tractors

In 1983 there were:

- **1 truck tractor occupant killed**
- **23 truck tractor occupants injured**
- **180 accidents involving truck tractors**
  - **1 fatal accident involving a truck tractor**
  - **42 personal injury accidents involving truck tractors**
  - **137 property damage accidents involving truck tractors**

1 person was killed in a truck tractor accident. Of this number, 0 (0.0 percent) were not truck tractor occupants.

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	1	0.6
Improper passing	3	1.7
Left of center, not passing	1	0.6
Failure to yield	7	4.0
Wrong way, one-way road	1	0.6
Speed too fast	7	4.0
Drag racing	0	--
Improper turn	2	1.1
Improper lane change	2	1.1
Following too close	1	0.6
Improper or no signal	2	1.1
Disregarded R.R. signal	0	--
Disregarded warning signal	0	--
Reckless driving	0	--
Improper backing	4	2.3
Illegal or improper parking	1	0.6
Failure to have control	13	7.4
Lights not on	0	--
Inattentive/distracted	7	4.0
Confused/inexperienced	2	1.1
Vision obscured	4	2.3
Oversized vehicle	1	0.6
Other	13	7.4

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	167	96.5
Drinking - impaired	1	0.6
Drinking - not impaired	3	1.7
Drugs	0	--
Physical defect	1	0.6
Fatigued	1	0.6
Apparently asleep	0	--
Ill	0	--
Under medication	0	--
Infirmities of age	0	--
Other	0	--
Total no. of drivers (condition stated)	173	
Condition not stated	2	
GRAND TOTAL	175	

Driver Sex	Number of Drivers	Percent
Male	170	98.3
Female	3	1.7
Total no. of drivers (sex known)	173	
Sex not stated	2	
GRAND TOTAL	175	

Driver Age	Number of Drivers	Percent
15 & younger	0	--
16	0	--
17	0	--
18	0	--
19	4	2.3
20-24	15	8.7
25-34	63	36.6
35-44	51	29.7
45-54	24	14.0
55-64	11	6.4
65-74	3	1.7
75 & older	1	0.6
Total no. of drivers (age known)	172	
Age not stated	3	
GRAND TOTAL	175	

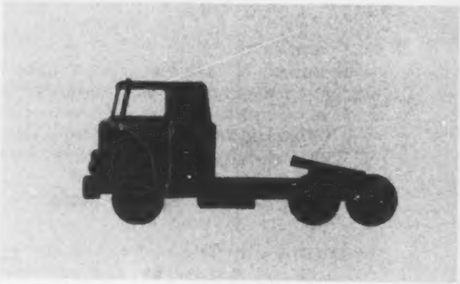
Note: In 1983 truck tractor accidents, 79.2 percent of the truck tractor occupants who were killed or injured were not wearing seat belts. 0.0 percent were wearing seat belts, and seat belt use was unknown or unreported for 20.8 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	105	59.7
Turning left	15	8.5
Turning right	13	7.4
Backing	6	3.4
Stopped in traffic	3	1.7
Parked	6	3.4
Making U-turn	1	15.9
Passing	14	
Changing lanes	2	
Merging	0	
Parking	3	
Slowing-stopping	7	
Unattended moving vehicle	0	
Other	1	
Total no. of vehicles (action stated)	176	
Action not stated	5	
GRAND TOTAL	181	

Note: Total number of vehicles includes parked truck tractors involved in accidents.

Truck Tractors



Vehicle Defect	Number of Vehicles	Percent
None	127	94.8
Brakes	4	5.2
Lights	0	
Steering	0	
Wipers	0	
Tires	3	
Trailer hitch	0	
Other	0	
Total no. of vehicles (defect stated)	134	
Defect not stated	47	
GRAND TOTAL	181	

Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	2	5.9
Underpass/bridge support	1	2.9
Building	1	2.9
Culvert	1	2.9
Curb	0	--
Ditch	12	35.3
Island/raised median	0	--
Embankment/retaining wall	1	2.9
Fence	2	5.9
Guardrail	1	2.9
Light pole	2	5.9
Sign post	0	--
Tree or shrubbery	2	5.9
Utility pole	1	2.9
Other pole or support	0	--
Mailbox	0	--
Impact attenuator	0	--
Other	8	23.5

18.8% of truck tractors involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

The Environment

Light	Number of Accidents	Percent
Dawn	4	2.2
Daylight	145	80.6
Dusk	3	1.7
Darkness (road lighted)	15	8.3
Darkness (road unlighted)	13	7.2
Total no. of accidents (light stated)	180	
Light not stated		
GRAND TOTAL	180	

Note: Figures indicate number of accidents involving truck tractors occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	101	56.1
Cloudy	53	29.4
Fog	5	2.8
Mist	3	1.7
Rain	10	5.6
Sleet/hail	2	1.1
Snow	18	10.0
Strong wind	5	2.8
Other	0	--

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Traffic Controls	Number of Accidents	Percent
No controls	128	71.5
Traffic signals	29	16.2
Stop sign	12	6.7
Yield sign	1	5.6
No passing zone (marked)	3	
R.R. warning sign	0	
R.R. automatic signal	0	
R.R. crossing gate	0	
Other	6	
Total no. of accidents (control stated)	179	
Control not stated	1	
GRAND TOTAL	180	

Iowa Accidents Involving

Truck Tractors With Trailers

In 1983 there were:

- **12 occupants of truck tractors with trailers killed**
- **400 occupants of truck tractors with trailers injured**
- **2,538 accidents involving truck tractors with trailers**
  - **63 fatal accidents involving truck tractors with trailers**
  - **723 personal injury accidents involving truck tractors with trailers**
  - **1,752 property damage accidents involving truck tractors with trailers**

73 persons were killed in truck tractor with trailers accidents. Of this number, 61 (83.6 percent) were not occupants of truck tractor with trailers.

The Driver

Driver Action/ Contributing Circumstances	Number of Drivers	Percent
Ran traffic control	28	1.1
Improper passing	45	1.7
Left of center, not passing	19	0.7
Failure to yield	64	2.5
Wrong way, one-way road	2	0.1
Speed too fast	134	5.2
Drag racing	0	--
Improper turn	38	1.5
Improper lane change	47	1.8
Following too close	63	2.4
Improper or no signal	11	0.4
Disregarded R.R. signal	2	0.1
Disregarded warning signal	8	0.3
Reckless driving	3	0.1
Improper backing	39	1.5
Illegal or improper parking	2	0.1
Failure to have control	293	11.3
Lights not on	2	0.1
Inattentive/distracted	79	3.0
Confused/inexperienced	19	0.7
Vision obscured	151	5.8
Oversized vehicle	19	0.7
Other	154	5.9

Note: From 0-2 actions/circumstances are listed for each driver involved in an accident.

Driver Condition	Number of Drivers	Percent
Apparently normal	2,460	96.9
Drinking - impaired	9	0.4
Drinking - not impaired	5	0.2
Drugs	1	--
Physical defect	3	0.1
Fatigued	19	0.7
Apparently asleep	38	1.5
Ill	1	--
Under medication	0	--
Infirmities of age	2	0.1
Other	2	0.1
Total no. of drivers (condition stated)	2,540	
Condition not stated	51	
GRAND TOTAL	2,591	

Driver Sex	Number of Drivers	Percent
Male	2,503	98.5
Female	39	1.5
Total no. of drivers (sex known)	2,542	
Sex not stated	49	
GRAND TOTAL	2,591	

Driver Age	Number of Drivers	Percent
15 & younger	1	--
16	1	--
17	2	0.1
18	11	0.4
19	20	0.8
20-24	295	11.8
25-34	879	35.1
35-44	615	24.6
45-54	447	17.9
55-64	210	8.4
65-74	17	0.7
75 & older	3	0.1
Total no. of drivers (age known)	2,501	
Age not stated	90	
GRAND TOTAL	2,591	

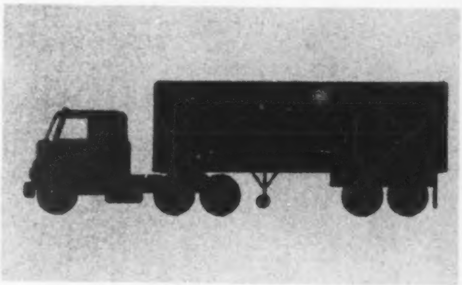
Note: In 1983 truck tractor with trailer accidents, 70.8 percent of the truck tractor with trailer occupants who were killed or injured were not wearing seat belts, 7.0 percent were wearing seat belts, and seat belt use was unknown or unreported for 22.3 percent of those killed or injured.

The Machine

Vehicle Action	Number of Vehicles	Percent
Going straight	1,721	66.8
Turning left	153	5.9
Turning right	211	8.2
Backing	67	2.6
Stopped in traffic	50	1.9
Parked	55	2.1
Making U-turn	7	12.5
Passing	92	
Changing lanes	68	
Merging	15	
Parking	13	
Slowing-stopping	79	
Unattended moving vehicle	3	
Other	44	
Total no. of vehicles (action stated)	2,578	
Action not stated	71	
GRAND TOTAL	2,649	

Note: Total number of vehicles includes parked truck tractors with trailers involved in accidents.

Truck Tractors With Trailers



Vehicle Defect	Number of Vehicles	Percent
None	1,901	93.5
Brakes	42	2.1
Lights	8	4.4
Steering	6	
Wipers	0	
Tires	29	
Trailer hitch	8	
Other	39	
Total no. of vehicles (defect stated)	2,033	
Defect not stated	616	
GRAND TOTAL	2,649	

The Environment

Light	Number of Accidents	Percent
Dawn	64	2.5
Daylight	1,660	65.6
Dusk	62	2.5
Darkness (road lighted)	228	9.0
Darkness (road unlighted)	515	20.4
Total no. of accidents (light stated)	2,529	
Light not stated	9	
GRAND TOTAL	2,538	

Note: Figures indicate number of accidents involving truck tractors with trailers occurring under the conditions indicated.

Weather	Number of Accidents	Percent
Clear	1,207	47.6
Cloudy	762	30.0
Fog	53	2.1
Mist	75	3.0
Rain	191	7.5
Sleet/hail	40	1.6
Snow	319	12.6
Strong wind	127	5.0
Other	11	0.4

Note: Some accident reports listed more than one type of weather condition. The percentage listed for each weather condition is based on the total number of accidents for this type of vehicle.

Fixed Object Struck	Vehicles Striking Object	Percent
Bridge/overpass	45	8.6
Underpass/bridge support	0	--
Building	6	1.1
Culvert	7	1.3
Curb	7	1.3
Ditch	163	31.1
Island/raised median	8	1.5
Embankment/retaining wall	16	3.1
Fence	32	6.1
Guardrail	47	9.0
Light pole	40	7.6
Sign post	50	9.5
Tree or shrubbery	8	1.5
Utility pole	22	4.2
Other pole or support	17	3.2
Mailbox	3	0.6
Impact attenuator	1	0.2
Other	52	9.9

19.8% of truck tractors with trailers involved in accidents struck fixed objects.

Note: Impact attenuators are crash-cushioning devices.

Traffic Controls	Number of Accidents	Percent
No controls	1,897	75.0
Traffic signals	302	11.9
Stop sign	124	4.9
Yield sign	9	8.2
No passing zone (marked)	45	
R.R. warning sign	4	
R.R. automatic signal	9	
R.R. crossing gate	1	
Other	139	
Total no. of accidents (control stated)	2,530	
Control not stated	8	
GRAND TOTAL	2,538	